

Remedial Action Work Plan

*Alpine Lumber Company Property
1400 North Division Street
Sandpoint, Bonner County, Idaho*

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TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
EXECUTIVE SUMMARY	iii
1.0 INTRODUCTION and BACKGROUND	1
1.1 <i>Background on Site</i>	1
1.1.1 Site Location and Surrounding Properties	1
1.1.2 Description of the Site	2
1.1.3 Current and Historical Use of the Site	3
1.1.4 Current and Future Use of the Site	4
1.1.5 Evaluation of Ground Water Use	5
1.1.6 Future Use of the On-Site Ground Water and Surface Water	8
1.2 <i>VCP Site Evaluation and Closure Process</i>	8
2.0 SUMMARY OF SITE CONDITIONS	9
2.1 <i>URS Assessment Programs</i>	9
2.1.1 October 2006 Field Program	9
2.1.2 March through May 2007 Field Program	10
2.2 <i>Summary of Findings</i>	11
2.2.1 Geology	11
2.2.2 Groundwater Occurrence	11
2.2.3 Contaminant Distribution	12
3.0 RISK EVALUATION RESULTS	15
3.1 <i>Receptors and Potential Routes of Exposure</i>	15
3.2 <i>Chemicals of Concern</i>	15
3.3 <i>Representative COC Concentrations</i>	16
3.4 <i>Risk Estimates</i>	16
4.0 REMEDIAL PLAN	18
4.1 <i>Recommended Remedial Measures</i>	18
4.2 <i>Environmental Covenant Implementation</i>	19
4.3 <i>Public Review of Work Plan</i>	19
4.4 <i>Work Plan Completion Report and Certificate of Completion</i>	20

TABLE OF CONTENTS (continued)

FIGURES

1. *Site Location Map*
2. *Sampling Points October 2006 and April 2007*
3. *VOC Distribution in Soil*
4. *PAH Distribution in Soil*
5. *VOC Distribution in Ground Water*
6. *PAH Distribution in Ground Water*

TABLES (excerpted from)

- *URS October 2006 Assessment*
- *URS March-May 2007 Assessment*

ATTACHMENTS

- A: Voluntary Remediation Agreement*
- B: Excerpted URS Reports*
- C: IDEQ MEMORANDUM: Amended Risk Evaluation for Alpine Lumber, Sandpoint, Idaho Brownfield Site (January 25, 2007; Amended July 10, 2007)*
- D: Legal Descriptions of the Alpine Lumber Company and the Albright & Thurston Inc. Properties*
- E: Idaho Department of Water Resources – Listing of Driller Reports*

EXECUTIVE SUMMARY

On behalf of Bitterroot Investments, LLC (the owner), Cody Ehlers Group has prepared a Voluntary Remediation Work Plan (WP) in order to address soil and ground water impacts at the former Sandpoint Wood Treating Site (the "Site", also known as Alpine Lumber), in response to entering into the Voluntary Cleanup Program (VCP) with the Idaho Department of Environmental Quality (DEQ). The four-acre Site, located at 1400 N. Baldy Mountain Road in Sandpoint, Bonner County, Idaho, is currently operated by Lumberman's Inc., a commercial building supply company. The southeastern portion of the Site was used historically from the early 1900s until the mid-1950s as a pole treating facility for various lumber companies. The Site has operated as commercial building supply company from 1985 to the present.

The WP includes the results of a *Limited Phase II Environmental Site Assessment* (October 2006) and subsequent *Supplemental Assessment* (March 2007) conducted by URS Corporation (URS) under contract with the DEQ. The objective of the assessment was to identify the vertical and horizontal extent of any wood treatment chemical contamination in shallow soil and ground water at the Site and the adjacent properties. URS drilled soil borings, constructed monitoring wells, collected soil and ground water samples, and analyzed soil and ground water samples for constituents typical of wood treating facilities. Results showed the impacts to soil and ground water from volatile organic compounds are restricted to the southeastern portion of the Site at depths greater than 5 feet and on the Albright & Thurston property within 50 feet of the Alpine property line.

The WP also includes the results of the DEQ Risk Evaluation. DEQ conducted its risk evaluation to estimate the degree of risk to the identified receptors from complete or partially complete contaminant pathways. In order to develop these risk estimates, DEQ used the characterization data from the URS investigations and accepted risk assessment assumptions and models. The theoretical receptor pathways were:

- Construction workers:
- Non-residential workers:
- Residential and Non-Residential Off-Site Receptors
- Ground Water Ingestion by On-Site Workers and Residential and Non-Residential Off-Site Receptors:

The results of the site assessment work coupled with the risk evaluation conducted by DEQ, identified one receptor pathway for which the risk is considered to be unacceptable. That pathway is the ground water ingestion

pathway. In addition, in order to prevent the potential for future residential use of the Site and the potential exposure of a future construction worker at the Site, measures to prevent the completion of two other pathways were also recommended by DEQ.

The WP proposes an environmental covenant (i.e., deed restriction) which puts legal requirements on the property deed restricting the use of the Site in the manner described in the environmental covenant. Idaho Law and regulations allow the use of such an environmental covenant as a measure to prevent risk to receptors from impacted soils and ground water. This environmental covenant will protect the pathways identified in the risk assessment and by DEQ and will include the following provisions:

1. The environmental covenant will prevent ground water to be used for drinking water purposes on both the Alpine Lumber and the Albright & Thurston properties. Based on direct communication with the County Health Department and a review of state records, there are no private wells in the vicinity and downgradient of the Site that could be expected to be impacted by the historic contamination. Therefore, other potential drinking water receptors are not at risk.
2. The environmental covenant will not allow the Site to be rezoned as residential (i.e., the property will remain zoned as light industrial).
3. The environmental covenant will restrict the manner that excavation is conducted in the southeast portion of the Site at depths greater than 4 feet deep by requiring that a soil management plan be submitted and approved by DEQ prior to excavation. The soil management plan will include provisions for notification of DEQ prior to starting work, protection of workers during excavation, on-site environmental personnel during excavation, monitoring of soils, on-site protection of soils during construction, segregation of soils, and proper disposal of soils.

1.0 INTRODUCTION and BACKGROUND

Bitterroot Investments, LLC has entered into a Voluntary Remediation Agreement (Agreement) with the Idaho Department of Environmental Quality (DEQ) for the purpose of implementing a corrective action program at the Sandpoint Wood Treating Site (the “Site”, also known as the Alpine Lumber site). The Site is currently operated by Lumberman’s Inc., a commercial building supply company located at 1400 N. Baldy Mountain Road in Sandpoint, Bonner County, Idaho (see **Figure 1**).. The Site was used historically from the early 1900s until the mid-1950s as a pole treating facility for various lumber companies. Wood treating operations ceased in the mid-1950s and the Site remained vacant until the 1970s when a portion of it was used as a residence. The Site has operated as commercial building supply company from 1985 to the present. The Agreement was entered into pursuant to the Idaho Land Remediation Act (Idaho Code sections 39-7201 through 39-7210) and the Idaho Land Remediation Rules, IDAPA 58.01.18 et seq. The DEQ completed its review of the Agreement and determined that Bitterroot Investments LLC is eligible to participate in the Voluntary Cleanup Program (VCP) established under Idaho Code section 39-7201 et seq. A copy of the Agreement is included as **Attachment A**.

Cody Ehlers Group, on behalf of Bitterroot Investments, LLC, has prepared this Voluntary Remediation Work Plan (WP) for the Site. This WP proposes a remedial option for those areas that require remediation in accordance with the Idaho Remediation Standards referenced in IDAPA 58.01.18.023. The WP includes the results of a *Limited Phase II Environmental Site Assessment* (October 2006) and subsequent *Supplemental Environmental Assessment* (July 18, 2007) conducted by URS Corporation (URS) under contract with the DEQ to provide technical assistance for the Waste Management and Remediation Program (Contract C432). The objective of the assessment was to identify the vertical and horizontal extent of any wood treatment chemical contamination in shallow soil and ground water at the Site and the adjacent properties. The WP also includes the results of the DEQ Risk Evaluation as outlined in the January 25, 2007 (amended July 10, 2007) memorandum. The URS assessment and DEQ risk evaluation work were completed in response to a Brownfield’s Program assessment request by the City of Sandpoint.

1.1 Background on Site

1.1.1 Site Location and Surrounding Properties

The Site is operated as a retail and wholesale building supply yard by Lumberman’s Inc.. The Site is a trapezoidal, 4-acre parcel at the southwestern

corner of the intersection of North Baldy Mountain Road and North Division Street. It is bordered in all four directions by business properties. To the east, directly across North Division Street, is a light industrial zoned property known as the Gordon Property. A vacant mobile home, a garage, and an old barn are located on the Gordon property. To the southeast, directly south of the Gordon property, are office buildings. To the south, an active rail line runs along the Site boundary. The Albright & Thurston Construction Company offices are on the south side of the rail line. To the west, there is a property with a warehouse. To the north, across N. Baldy Mountain Road, are the Bonner County Public Works Garage and a lot with an unused residential building. The Wes Olson Trucking property is also across N. Baldy Mountain Road and shares a common border with the Public Works Garage.

The Site and immediately surrounding area are zoned light industrial and are presently used for business purposes. There are residential subdivisions to the south and southwest of the Albright & Thurston property, approximately 500 feet south of the Site. The main residential portion of Sandpoint begins approximately 1000 feet to the southeast of the Site. The DEQ Risk Evaluation assumed on-site receptors to be non-residential workers and off-site receptors to be both non-residential and residential receptors (see **Attachment C**).

1.1.2 Description of the Site

The Site is operated as a retail and wholesale building supply yard. The improvements include three metal-sided concrete slab-on-grade buildings and an open-sided storage shed. The entire lot is asphalt-paved with the exception of a drainage swale along North Baldy Mountain Road, a storm water retention pond at the western end of the Site, a second drainage ditch behind the long storage shed, and the long open-sided shed with a gravel floor. The entrance fronts onto North Division Street. Virtually the entire yard is surrounded with a chain link fence with electric locking gates at the entrances on North Division Street and North Baldy Mountain Road. **Figure 2** presents a facility layout.

The main building, constructed of modular steel on a concrete slab, consists of both administrative and warehouse sections. The 14,400 square foot building contains a two story, non-warehouse space that is occupied by sales and administrative offices, a shipping office, a paints and stains storage room, a window and mirror framing room, a design/drafting room, and restrooms. The 9,800 square foot warehouse section is used for storage of nails, metal fasteners, insulation, aluminum flashing, hardwoods, pine lumber and molding strips. There is an open shed outside the eastern wall of the warehouse that is used to stockpile plywood on metal racks. There are no floor drains in the slab floor. Bay doors open at both ends of the warehouse. The non-warehouse space is

heated with a natural-gas fired furnace. The warehouse is unheated. Water and sewer are provided by the City of Sandpoint.

The second warehouse (Building #2) is located in the center of the Property. This structure is 70 x 100 feet. It contains a small dispatch office at its northeastern corner. The building is used to store plywood and drywall products. Building # 2 has no heat or running water.

The third warehouse (Building # 3) is located at the western end of the Property. It is approximately 50 x 75 feet. It contains a small office with a rest room. An open sided shed used to store a snow blower is present at the southeastern corner of the building. Building # 3 is used to store windows and doors. It is connected to municipal sewer and water.

The fourth structure at the Site is a long open-side shed. This shed has a gravel-lined floor. It has no heat or running water. It is used for lumber storage. There is a small enclosed shed at the north end of the shed that is used for chemical storage. It stores small containers of gasoline and oil in plastic bins.

Metal racks used for timber storage are located throughout the paved yard.

1.1.3 Current and Historical Use of the Site

Using information gathered from agency files, including previous environmental reports, aerial photographs dating back to 1951 and interviews with knowledgeable people including staff members of the Sandpoint Historical Museum and the DEQ, CEG has developed the history of the Site and its immediate surroundings set forth below. Among other reports, CEG used the *"Site Inspection Report for the North Sandpoint Wood Treating Facilities, Sandpoint, Idaho"*, prepared by the URS Corporation for the US Environmental Protection Agency, dated May 1996

The lumber yard and the surrounding properties to the north across N. Baldy Mountain Road comprise what is known as the Division Street Wood Treating Facilities. This former 16-acre parcel (12 acres north of N. Baldy Mountain Road and 4 acres south of it) was developed as a wood treating operation beginning around 1917 and ending in mid-1950s. Of particular interest, the historical operations included treatment of wooden poles with preservatives. These treatment operations occurred in what is now the southeastern corner of the Alpine Lumber Company Site. Poles were brought in by rail car and immersed into unlined pits filled with creosote and a petroleum mixture. The poles were then removed from the pits and placed on the railcars and allowed to dry. Once dry, the poles were then delivered to a stockpile area at another location in

anticipation of delivery to customers. Apparently, the creosote/petroleum mixture was replenished as necessary.

Although still owned by the wood treating companies, the parcels were vacant from the 1950s until the land use began to change in the mid-1970s. The Bonner County Maintenance Garage began its operations across North Baldy Mountain Road in 1976. The metal warehouse structure on the lot due west of Alpine Lumber was constructed at this time.

It appears that the lumber yard property was still vacant throughout the 1970s although there is some uncorroborated information obtained at the Panhandle Health Department to indicate that a residential trailer may have occupied the southeastern corner of the Site near to what are now the filled-in pits. Based on aerial photographs, the two small buildings on the Olson Property were built between 1978 and 1983.

No industrial activities occurred on the eastern portion of the lumber yard until Bitterroot Investments LLC bought it in 1985. Mr. Myers of Bitterroot constructed the initial building and the long shed and opened Alpine Lumber Company adding Building # 2 in the early 1990s. Around the same time, Michael Boeck bought the westernmost portion of the parcel that is now the lumber yard and constructed what is now Building # 3. Records at the Bonner County Assessors office show that the building was constructed in 1970 when it was still owned by the Joslyn Pole Company. Information obtained at the Assessors office and from the 1996 URS report indicates that Building # 3 was used as a coffee roasting business, gymnastics center and a “wood cut shop.” Mr. Myers purchased the lot containing Building # 3 from Mr. Boeck in October 2000.

1.1.4 Current and Future Use of the Site

The Site has operated as a lumber yard since the early 1990s. The owner of the Site, Bitterroot Investments LLC, planned to expand the operation by building a new warehouse featuring a work shop and storage area resulting in the need to hire several additional employees. However, because the Site’s appraised valuation was negatively impacted due to the “unknown status” regarding historic contamination, Bitterroot Investments, LLC had difficulty securing financing for this expansion. Lenders were optimistic that financing could be arranged once they received assurances that the historic contamination issues were better understood. Bitterroot Investments contacted the City of Sandpoint regarding the postponement of the planned expansion due to financial hurdles. The City responded by requesting that DEQ conduct a Brownfield’s Assessment on the Site.

1.1.5 Evaluation of Ground Water Use

The north section of Sandpoint where the Site is located receives its potable water supply from the City of Sandpoint. According to the *Site Inspection Report for the North Sandpoint Wood Treating Facilities*, prepared by URS in 1996 for Region 10 EPA, (the "1996 EPA Wood Treating Report"), the City of Sandpoint receives its municipal water from a reservoir on Little Sand Creek, which is located more than 2 miles north of Sandpoint in the Kaniksu National Forest.. The City has no municipal wells. The City municipal water system covers the Site area, the surrounding light industrial zoned area, and the residential areas to the south and southeast.

Based on ground water flow direction established from water levels in Site wells, the historical contamination at the Site potentially threatens ground water to the east and southeast of the Site. The 1996 EPA Wood Treating Report identified Sand Creek (approximately 4000 feet to the east) and Chuck Slough (approximately 500 feet to the west) as hydraulic boundaries for shallow ground water flow. While petroleum compounds typically attenuate within several hundred feet of the source, risk studies conservatively consider areas within ½ mile to 1 mile as being potentially at risk.

Multiple sources of information were reviewed to determine if there was anyone drinking ground water in the vicinity of and downgradient of the Site. These are as follows:

1. Personnel of the County Health Department informed CEG that there are no active drinking water wells east or southeast of the Site.
2. The 1996 EPA Wood Treating Report identified 3 domestic wells within ½ mile of the North Sandpoint wood treating facilities. The point of origin for this analysis was approximately ¼ mile to the southeast of the Site. This report concluded that these wells were not at risk from the wood treating facilities (which includes the Site).
3. The Idaho Department of Water Resources database for wells was reviewed to identify possible drinking water wells within the area. Three square mile sections were reviewed with the review emphasizing areas within a mile (or to the nearest hydraulic boundary) east and southeast of the Site based on the ground water flow direction. Portions of Sections 15, 16 and 22 of Township 57N, Range 02W were reviewed. Section 15 is centered approximately ½ mile east of the Site, and, therefore covers

ground water migration to the east and east-south-east from the site. The northeast and northwest quarters of Section 22 are approximately ½ to 1 mile south-southeast to southeast of the Site. Portions of the southeast and northeast quarters of Section 16 cover from the Site to Chuck Slough to the west.

The following table summarizes the results of this review. **Attachment E** shows the database printouts and the available drillers reports. Three domestic wells were identified from the database with coordinates showing that two of these wells were located west of the Site and one located southeast of the Site. The two wells to the west are of minimal concern as ground water flows to the east and southeast. In fact, a review of driller reports suggests that these wells have improper coordinates and are actually more than a ½ mile west of the Site on the west side of Chuck Slough (see the table below). The Chaudry well, identified as located to the southeast of the Site, also has incorrect coordinates. The Well Driller Report for this well identified the location as Pinecrest Loop Road which is more than a mile to the southwest of the Site. This information is also consistent with the fact that there is municipal water available southeast of the Site in the main residential portion of the City.

In summary, based on direct communication with the County Health Department and a review of state records, there are no private wells in the vicinity and downgradient of the Site that could be expected to be impacted by the historic contamination.

**DRINKING WATER WELLS IN SECTIONS 15, 16 (EASTERN PORTION) AND 21
FROM THE IDAHO DEPARTMENT OF WATER RESOURCES DATABASE**

Database Location	1/16 Tract	Name	Address	Depth of well (ft)	Comments
57N/02W/16	NWSE	Sam Wormington	Route #1	118 feet (flowing)	No Route 1 listed and no road at defined coordinates. Coordinates apparently incorrect. Sketch shows tract to be NENW which places it on the west side of Chuck Slough over ½ mile northwest of Site.
57N/02W/16	SWNE	Jack Owens	Route 3/(644 Gooby Road)	80 feet (overburden)	Coordinates apparently incorrect. Current address for Owens is Gooby Road approx. 1 mile northwest of Site on west side of Chuck Slough.
57N/02W/15	SWSW	Mark Choudrey	Pinecrest Loop Road	302 feet (bedrock)	Coordinates incorrect. Pinecrest Loop Road approx. 1 mile southwest of Site on west side of Chuck Slough.

1.1.6 Future Use of the On-Site Ground Water and Surface Water

Ground water within this area is shallow (within 10 feet of the ground surface) and is found within a low-yielding, predominantly clayey deposit. As such, ground water yields in this area typically would not support light industrial needs. In addition, the shallow depths to water make ground water susceptible to negative impacts from surficial spills, making the use of the municipal supply a more reliable and safer alternative.

The Alpine Lumber Company and the Albright & Thurston properties as well as other surrounding properties are expected to continue to use municipal supply for the foreseeable future.

Both the Site and Albright & Thurston properties are relatively flat. Virtually all of each property is covered with buildings or asphalt pavement. There are three catch basins in the center and north center of the Site. Storm water is collected via these three structures as well as the two drainage ditches and is piped to the retention pond. From the pond, storm water discharges via another pipe to the drainage ditch leading to Chuck Slough and then flows south into the Pend Oreille River.

Storm water from the Albright & Thurston property will also discharge along its paved surfaces ultimately discharging into the ditch leading to Chuck Slough and then flowing south into the Pend Oreille River.

1.2 VCP Site Evaluation and Closure Process

The site evaluation and closure process in the VCP consists of several steps from entry into the program through site closure. In summary, these steps include the following:

- Entry into VCP – a municipality requests that a site be included in the VCP.
- Site characterization – the nature and extent of soil and ground water contamination is characterized (see Section 2).
- Risk evaluation – pathways from contamination to receptors are defined. Risk to potential receptors is evaluated with applicable models to define receptors that could be at risk (see Section 3).
- Remedial planning – solutions are defined to prevent unwanted exposure of potential receptors in a VCP work plan (see Section 4).
- Site closure – accepted solutions are implemented. Documentation is sent to DEQ. DEQ provides a certificate of completion.

2.0 SUMMARY OF SITE CONDITIONS

This section presents the findings of the 2006 Phase II Environmental Assessment and the 2007 Supplemental Assessment used in developing a model of site conditions with respect to the hydrogeologic setting and the distribution of contaminants of concern. URS conducted a limited Phase II Environmental Assessment in October 2006, summarizing its results in a January 16, 2007 report. The assessment followed a request by City of Sandpoint to have the DEQ conduct a preliminary Brownfields assessment of the Alpine Lumber property.

2.1 URS Assessment Programs

2.1.1 October 2006 Field Program

URS conducted a field program to assess the vertical and horizontal extent of the wood treating chemicals formerly used at this Site. The field drilling and sampling program covered the entire four-acre Alpine parcel but did not go off-site. URS drilled 15 soil borings to depths between 16 and 20 feet below ground surface (bgs) using a direct push drilling rig (borings BH-1 through BH-15—see **Figure 2**). Soil samples were collected from two depths in each boring based on field observations and testing protocols developed to identify likely zones of contamination. Ground water samples were collected from each boring using temporary well materials.

Two additional soil borings were drilled using a hollow stem auger (HSA) drilling rig. Two samples each were collected from these two borings, as well. Both of these wells were finished as permanent, two-inch monitoring wells. Ground water samples were collected from these two wells (BH-17/MW-2 and BH-18/MW-3) along with an existing well located southeast of the Site across North Division Street (well MW-1WS—see **Figure 2**).

Both soil and ground water samples were analyzed for Volatile Organic Compounds (VOCs) using EPA method 8260B, Polynuclear Aromatic Hydrocarbons (PAHs) and pentachlorophenol (PCP) using method 8270 modified and 8270 with high vacuum injection (HVI) for the ground water samples and dioxins and furans using method 8290. These analytical parameters were chosen based upon the known chemical usage during the historical wood treatment operations.

Soil type was logged by the field geologist during the site work. Following completion of the wells, ground water measurements were collected from the temporary wells and the three permanent wells for the purpose of determining ground water flow direction.

Following the submission of the January 16, 2007 URS report, DEQ began to conduct a risk evaluation using the URS data, but could not complete it, in part due to identified data gaps. The DEQ requested that these data gaps be addressed so that it could refine its risk evaluation of Site conditions. URS addressed this request with a *Supplemental Environmental Assessment* conducted from March through May 2007. The results of those assessment activities are summarized in the URS July 19, 2007 report.

2.1.2 March through May 2007 Field Program

The Supplemental Assessment included the following tasks:

- the drilling of three soil borings that were then completed as ground water monitoring wells (one on the Site, one on Albright & Thurston and one on the Gordon properties),
- sampling of soil from two depth horizons in each boring,
- sampling of ground water from these three new wells (BH-18/MW-4, BH-19/MW-5 and BH-20/MW-6) plus the three existing monitoring wells,
- ground water elevation measurements,
- Installation of six soil vapor probes in the southeastern quadrant of the Alpine property, and the collection of six soil vapor samples from these probe locations.

The goals of this second assessment task were to fill in gaps in the understanding of the distribution of identified contaminants of concern (COCs) in soil vapor beneath the Alpine property and in ground water to the south and to the east of the Alpine property (Albright & Thurston and Gordon properties, respectively) and to better understand ground water flow direction within the study area. The data collected from both assessment tasks was then used to refine the DEQ's risk evaluation of the study area.

Following this report, the DEQ completed its Risk Assessment. The principal results of both URS assessment tasks and the DEQ Risk Assessment are summarized below. For a more complete description of URS' field activities, the reader is referred to the aforementioned reports attached to this document.

2.2 *Summary of Findings*

2.2.1 *Geology*

The regional geology of northern Idaho has been mapped as containing two main geologic elements (URS, 1996). Bedrock is comprised of highly faulted and fractured granitic materials that form the Selkirk Mountains and the Cabinet Mountains on either side of Bonner County. The bedrock also underlies the relatively new unconsolidated materials deposited in the lowlands within the Purcell Trench, which is a geologic low point between the mountain ranges. The Purcell Trench contains the Sandpoint Lowland north of Lake Pend Oreille. Within this lowland are valley fill deposits which are comprised of stream-deposited sands and gravels, lake bottom clays, silts and fine sands and poorly sorted mixtures of sands, silts, clays, gravels and boulders called glacial tills that were directly deposited by glacial ice. These deposits can extend to depths greater than 200 feet although well logs appended to the 1996 URS report indicate the presence of granitic bedrock within 50-60 feet of the ground surface at some locations in Sandpoint.

The URS soil boring logs provide site-specific information to a depth of approximately 20 feet deep. Immediately beneath the asphalt pavement at the Site, there is a layer of imported fill materials that was identified across the 4-acre site ranging in depth from one to four feet bgs. These materials are an unsorted mixture of silt, sand and gravel. Directly beneath the fill is a thin layer of silt, which, in turn, is underlain by predominantly clayey sediments containing varying amounts of silt with occasional, thin (2-12 inches thick) sand layers. These sediments are historical lake-bottom sediments as described above.

2.2.2 *Ground Water Occurrence*

Ground water occurs regionally within the unconsolidated materials. It has been detected in wells and soil borings in the Sandpoint area at shallow depths of up to 40 feet deep within these deposits. The thicker stream-deposited sand and gravel lenses are the more productive water-bearing zones in the Sandpoint area. Domestic wells screened within these lenses are generally shallow. Yields are considered to be relatively low in these deposits.

The finer-grained lake bottom sediments found at the Site are low-permeability sediments that do not generally yield viable amounts of water. Depths to ground water within the wells at the Site ranged between 7 and 9 feet bgs during the October 2006 sampling event. One month later the wells were re-measured and ground water was present at 2 to 4 feet bgs.

Ground water flow direction was calculated using both the October and November 2006 data. Flow direction changed from south-southeast in October to east-northeast in November. URS hypothesized in the *Supplemental Environmental Assessment Report* (July 18, 2007) that the change in direction of ground water flow was due to the influence of a drainage ditch located north of the Alpine Lumber site. When the ground water elevation is higher than the bottom of the ditch (e.g., late fall, winter, and spring), the ditch operates as a sink for ground water causing ground water to flow in a northerly direction toward the ditch. During drier periods, when the elevation of groundwater is lower than the ditch, groundwater flows to the south.

Additional ground water measurements collected in March, April and May of 2007 produced ground water depths ranging from just below ground surface (0.80 feet in MW-2) to 6.98 feet deep in MW-W-1S, located southeast of Alpine property across North Division Street. Flow direction varied from east-northeast (March) to northeast (April) to east-southeast (May). While variable, these directions are similar to what was mapped in October and November 2006 by URS.

2.2.3 Contaminant Distribution

The sampling results for the two URS assessment tasks are depicted on **Figures 3, 4, 5, and 6**. Additionally, the summary tables from the two URS reports are included in the Figures section. Please refer to these documents during the following discussion.

Volatile Organic Compounds (VOCs) in soil and ground water are depicted on **Figures 3 and 5**. As shown on these two figures, the impacts to soil and ground water from VOCs show a similar pattern: detected compounds are restricted to the southeastern portion of the Alpine property and the one well (MW-5) on the Albright & Thurston property that is within 50 feet of the Alpine property line.

In soil, no VOCs are present beneath the western half of the Alpine property or the Gordon property across North Division Street. Naphthalene is the most prevalent VOC in the impacted area. It is present in nine of ten sampling points in the southeastern corner of the property as well as in a 10-foot deep sample in the northeastern corner of the site (MW-3). The naphthalene detection in MW-3 is below the Initial Default Target Levels (IDTL) of 1.14 mg/kg. The naphthalene detections are in the vicinity of the historical wood treatment pits that have been identified during prior investigative work. The pit outlines on the referenced figures are based upon a review of a historical aerial photograph of this area. Note, also, that Mr. Gordon, who owns the property across North Division

Street, told URS and DEQ representatives that he remembers the location of these pits from the early to mid-1950s.

Other VOC detections were restricted to two boring locations BH-9 and MW-6 near to the former pits.

In ground water, VOC distribution is similar to that in soil. Again, naphthalene is the most prevalent compound, although its detection above the IDTLs is more limited in ground water (limited to five wells within the pit area). While naphthalene was detected in the Albright & Thurston well, it was below its IDTL of 209 ug/l. Naphthalene was not detected in either the Gordon well (MW-4) or in MW-W-1S. No VOCs were detected off-site from the Site.

One VOC, hexachlorobutadiene was present at the northwestern corner of Alpine in BH-2. Its detection is slightly above the IDTL. No other sampling points produced a detection of this compound. There are no buildings near to this sampling point.

Each of the detected VOCs, with the exception of the hexachlorobutadiene, is a petroleum-related compound that is likely a residual product of the use of wood treatment chemicals. Pentachlorophenol (PCP) has been used as a wood treatment chemical for over 60 years. It is typically mixed with petroleum oils and then applied to wood products. The hexachlorobutadiene is mainly used in the manufacture of rubber compounds.

Polynuclear Aromatic Hydrocarbons (PAHs) distribution in soil and ground water are depicted on **Figures 4 and 6**. As shown on these two figures, the impacts to soil and ground water from PAHs show a generally similar pattern to that of the VOCs. The PAH concentrations in soil are limited to the sampling points proximate to the former wood treatment pits and the Albright & Thurston well point. The detections in the southeastern corner are found in the deeper sample depths (9-15 feet bgs) but not in the shallow (2-3 feet bgs) sampling locations; these sample depths are all within the shallow ground water. No PAHs were detected in soil on the western half or the northeastern corner of Alpine and none were detected on the Gordon property.

Pentachlorophenol was detected in one location: boring BH-7 at a depth of 4 feet bgs. It was not detected in the deeper sample from BH-7 and was not detected in any other location within the study area.

PAHs in ground water are more widespread than in soil. However, the sampling points where individual PAHs exceed their respective IDTLs are the same ones where VOCs and PAHs were detected: the 10 points in the

southeastern corner of Alpine and the Albright & Thurston well point. One or more PAHs were detected in the other wells but none of these detections exceeded the IDTLs.

VOCs and PAHs in Soil Vapor differed in their distribution within the six sampling points. Several VOCs were detected in each of the six sampling points including VP-1 located in the far western portion of Alpine. The distribution of the VOCs as to concentration levels and number of compounds is similar site wide. PAHs were detected in three points closest to the former pits. Naphthalene, 2-methyl naphthalene and di-n-butyl phthalate were detected once each, in VP-2, VP-3 and VP-4, respectively. Note that naphthalene, which can be detected using either the VOC analytical method (8260B) or the PAH analytical method (8270 modified), was not detected using the 8260B method.

Dioxins/Furans in soil and ground water. Of the seven ground water samples collected for analyses of dioxins/furans, only ground water from BH-9 in the center of the southeastern corner of Alpine yielded detections that exceeded the IDTL Toxic Equivalency (TEF) Factor (which is compared to the IDTL for 2,3,7,8-TCDD, a dioxin compound). Sampling of one off-site well, MW-W-1s did not produce a TEF Factor above the IDTL. In soil, only the soil sample from the 4 – foot horizon in BH-7 at the northeastern corner of Alpine exceeded the TEF Factor.

3.0 RISK EVALUATION

This section summarizes the *Amended Risk Evaluation for the Alpine Lumber, Sandpoint, Idaho Brownfield Site* as outlined in the January 25, 2007 (amended July 10, 2007) memorandum prepared by DEQ (see **Attachment C**).

3.1 Receptors and Potential Routes of Exposure

DEQ determined that the following contaminant pathways exist for the identified receptors:

- Construction workers: Exposure routes are direct contact with surficial and subsurface soils (greater than one foot deep down to ground water), ingestion and inhalation of soil vapors.
- Non-residential workers: Exposure routes include indoor air inhalation of soil vapor and to a lesser degree direct contact. Direct contact is considered an unlikely pathway due to the depths at which contamination was first identified in the borings.
- Residential and Non-Residential Off-Site Receptors: Exposure routes included indoor air inhalation of vapors from contaminated ground water migrating from the Site. DEQ identified the ground water ingestion pathway as a lesser risk because the Alpine and surrounding properties are unlikely to use shallow ground water for drinking purposes.

3.2 Chemicals of Concern

DEQ identified four VOCs and 15 PAHs and PCP as Chemicals of Concern (COC). These chemicals were used by DEQ in its risk evaluation. The chemicals are:

PAHs/PCP

2-methylnaphthalene

Acenaphthene

Anthracene

Benzo (a) anthracene

Benzo (a) pyrene

Benzo b) fluoranthene

Benzo (g,h,i) perylene

Benzo (k) fluoranthene

Chrysene

Dibenzo (a,h) anthracene

Fluoranthene

Fluorene

Indeno (1,2,3-cd) pyrene

Pentachlorophenol
Pyrene

VOCs

1,2,4-trimethylbenzene
Ethyl benzene
Naphthalene
Tert-butyl benzene

3.3 *Representative COC Concentrations*

DEQ used maximum contaminant specific concentrations as representative COC concentration values in evaluating the potential risks to on-site and off-site receptors. These values were used to “provide a reasonably conservative estimate of the potential risks” to the identified receptors.

3.4 *Risk Estimates*

DEQ conducted its risk evaluation to estimate the degree of risk to the identified receptors from complete or partially complete contaminant pathways. In order to develop these risk estimates, DEQ used the following inputs into its mathematical models to develop the risk estimates for the identified receptors:

- Representative COC concentrations, as described above.
- Chemical-specific toxicological factors developed by EPA and others.
- Receptor-specific exposure factors including body weight, exposure duration and frequency, inhalation rates, dermal absorption factors, etc.
- Default or site-specific fate and transport parameters including the physical and chemical properties of the COC and the soil and ground water characteristics at the site.

These inputs were then used in the following fate and transport models selected by DEQ:

- Indoor Inhalation of Volatile Emissions from Soil and Water: DEQ uses the Johnson and Ettinger Model (EPA,2003) which combines an emission model with an indoor air mixing model.
- Surficial Soil Outdoor Air Inhalation: DEQ uses three models: a vapor emission model based on a volatilization model developed by Jury et al (1983), a particulate emission model (Cowherd et al, 1985) and an outdoor air mixing model based on a Gaussian Dispersion Model.

- Leaching to Ground Water: DEQ uses a 3-phase equilibrium partitioning algorithm to convert soil concentrations to leachate concentrations and a dilution attenuation model to mix leachate and regional ground water.
- Horizontal Migration in Ground Water: DEQ uses the Domenico steady-state analytical model to quantify the down gradient migration of chemicals from a source area (Domenico, 1982, 1990).

The following risks were developed during the risk evaluation. The discussion combines the results of the 2006 and 2007 URS data collection tasks. A copy of the DEQ memorandum is attached as **Attachment C**.

Construction workers: Exposure routes are direct contact with surficial and subsurface (greater than one foot deep down to ground water), ingestion and inhalation of soil vapors. The calculated risk to on-site construction workers was determined to be acceptable.

Non-residential workers: Exposure routes include indoor air inhalation of soil vapor and to a lesser degree direct contact. Direct contact was considered an unlikely pathway due to the depths at which contamination was first identified in the borings (typically over four feet deep). The calculated risks to these workers via the indoor air inhalation (soil vapor intrusion) pathway were acceptable using the assumed concentrations in soil vapor. These calculated risks are two to four orders of magnitude lower than acceptable risk levels and calculated hazard indices are over one to three orders of magnitude lower than acceptable hazard levels.

Residential and Non-Residential Off-Site Receptors: Exposure routes included indoor air inhalation of vapors from contaminated ground water migrating from the Alpine property. Risks associated with inhalation risks to this population were considered acceptable.

The risks considered to be acceptable to the potential receptors assume that the affected properties (Alpine Lumber Company and Albright & Thurston) will both continue to operate as light-industrial properties.

Ground Water Ingestion by On-Site Workers and Residential and Non-Residential Off-Site Receptors: DEQ identified the ground water ingestion pathway for these receptors as a lesser risk. DEQ assumed that ground water ingestion either on-site or off-site has a low probability of occurrence since municipal water is supplied to this section of Sandpoint (verified with the well evaluation – see Section 1.1.5). However, since ground water COC concentrations exceed the ingestion targets, some form of remedy is required to prevent exposure via this pathway.

4.0 REMEDIAL PLAN

This section outlines the plan for remedy of risks from the Site and presents the steps necessary to achieve site closure.

4.1 Recommended Remedial Measures

The results of the site assessment work in 2006 and 2007 coupled with the risk evaluation conducted by DEQ identified one receptor pathway for which the risk is considered to be unacceptable. That pathway is the ground water ingestion pathway. In addition, in order to prevent the potential for future residential use of the property and the potential exposure of a future construction worker at the property, measures to prevent the completion of two other pathways are also proposed. Although these two additional pathways were not identified in the risk assessment as unacceptable, Bitterroot is undertaking these remedies to comply with a request from DEQ and to be conservative in the prevention of potential risk.

DEQ allows the use of institutional controls to reduce the potential for receptors to be exposed to site-specific COCs. Therefore, as a remedy, an environmental covenant (i.e., deed restriction) is proposed which puts legal requirements on the property deed prohibiting or restricting the use of the property in the manner described in the environmental covenant. If the current or future owner wants to use the property in a manner that is prohibited or restricted by the environmental covenant, they would need to contact DEQ and either undertake a modification in the environmental covenant or meet the conditions outlined in the environmental covenant.

This environmental covenant will include the following provisions:

1. DEQ recognizes that the potentially affected populations on- and off-site are highly unlikely to use the impacted shallow ground water at the Alpine and Albright & Thurston properties for drinking water and therefore the practical risks are low. However, because the potential does exist for wells to be installed at these properties (however small the probability), the DEQ requires some form of remedy to insure that this pathway remains incomplete eliminating the potential risks to the receptors from drinking the shallow ground water. Therefore, the environmental covenant will prevent ground water to be used for drinking water purposes on both the Alpine Lumber and the Albright & Thurston properties.

2. The environmental covenant will not allow the Alpine Lumber property to be rezoned as residential (i.e., the property remains zoned as light industrial).
3. The environmental covenant will restrict the manner that excavation is conducted in the southeast portion of the Alpine Lumber site. These soils have been impacted with organic constituents during historic wood treating operations conducted beginning around 1917 and ending in mid-1950s (see Section 1.1.3). Although risks to construction workers were deemed “acceptable” (see Section 3.4), nevertheless, to prevent uncontrolled future exposure, the environmental covenant will restrict the manner in which excavation is conducted at depths greater than 4 feet below ground surface in this southeast portion of the property. The actual footprint of this area will be defined based on previous borings conducted in this area and will be defined in the environmental covenant. The environmental covenant will require that a soil management plan be submitted and approved by DEQ prior to excavation below 4 feet deep in the defined area. The soil management plan will include provisions for notification of DEQ prior to starting work, protection of workers during excavation, on-site environmental personnel during excavation, monitoring of soils, on-site protection of soils during construction, segregation of soils, and proper disposal of soils. Soil excavation, management and disposal will have to comply with Idaho law and regulations.

4.2 Environmental Covenant Implementation

Bitterroot Investments, LLC will prepare the environmental covenant meeting the three conditions cited above. The owners of Albright & Thurston have already been in discussion regarding the attachment of the environmental covenant on their property (preventing groundwater use) and have agreed to allow it. Copies of the Legal Descriptions of each of the two properties requiring the deed restrictions are included as **Attachment D**.

4.3 Public Review of Work Plan

After acceptance of the WP, the DEQ will initiate the public notification and comment requirements of Idaho Code Section 39-7206(3). The DEQ will be conducting the 30 day public comment period including a press release in the Bonner County Daily Bee. Applicable documents can be obtained at the Sandpoint Public Library 1407 Cedar Street, Sandpoint, Idaho. No later than 15 days after the close of the public comment period, the DEQ may schedule a

public hearing. DEQ may, based on the public comment process, recommend modifications to the WP or approve it without recommendations.

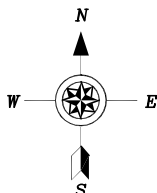
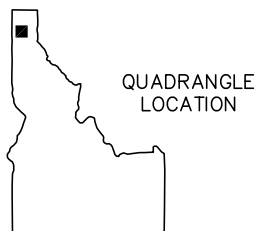
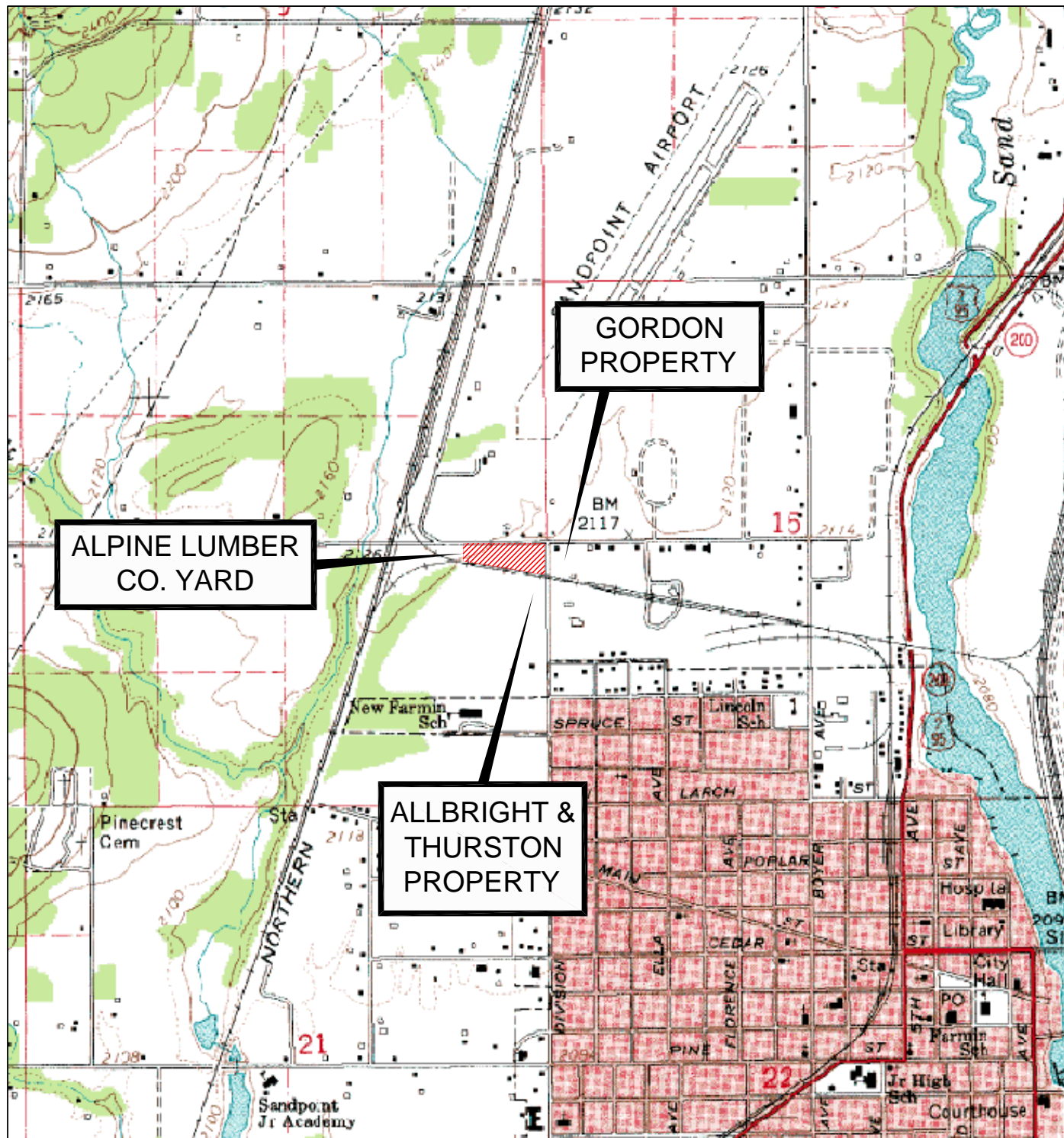
4.4 *Work Plan Completion Report and Certificate of Completion*

The *Work Plan Completion Report* will be prepared to document that the environmental covenant have been implemented on the two properties. The proposed language of the environmental covenant for each property will be submitted to DEQ for approval before it is recorded on the individual deeds. The environmental covenant language will be submitted for DEQ approval within 30 days of the approval of this Work Plan. Once approved, the environmental covenant will be recorded on the appropriate deeds at the Bonner County Recorder's Office in Sandpoint, Idaho.

The *Work Plan Completion Report* will contain information showing that Work Plan objectives have been met. This Report will consist of a description of the proposed remedy, its implementation, copies of the actual environmental covenants, and proof documenting the recordings of the environmental covenants. This Report will be submitted to the DEQ within 30 days of the recording of the environmental covenants.

The *Work Plan Completion Report* will also include a request that DEQ issue a *Certificate for Completion* for the Site. Per the Agreement and based on DEQ's review of the *Work Plan Completion Report*, the DEQ will issue the *Certificate for Completion* for the Site. Bitterroot Investments LLC will record the *Certificate of Completion* on the deed of the Alpine Lumber site.

Figures



0 1200 3000 6000
Scale in Feet

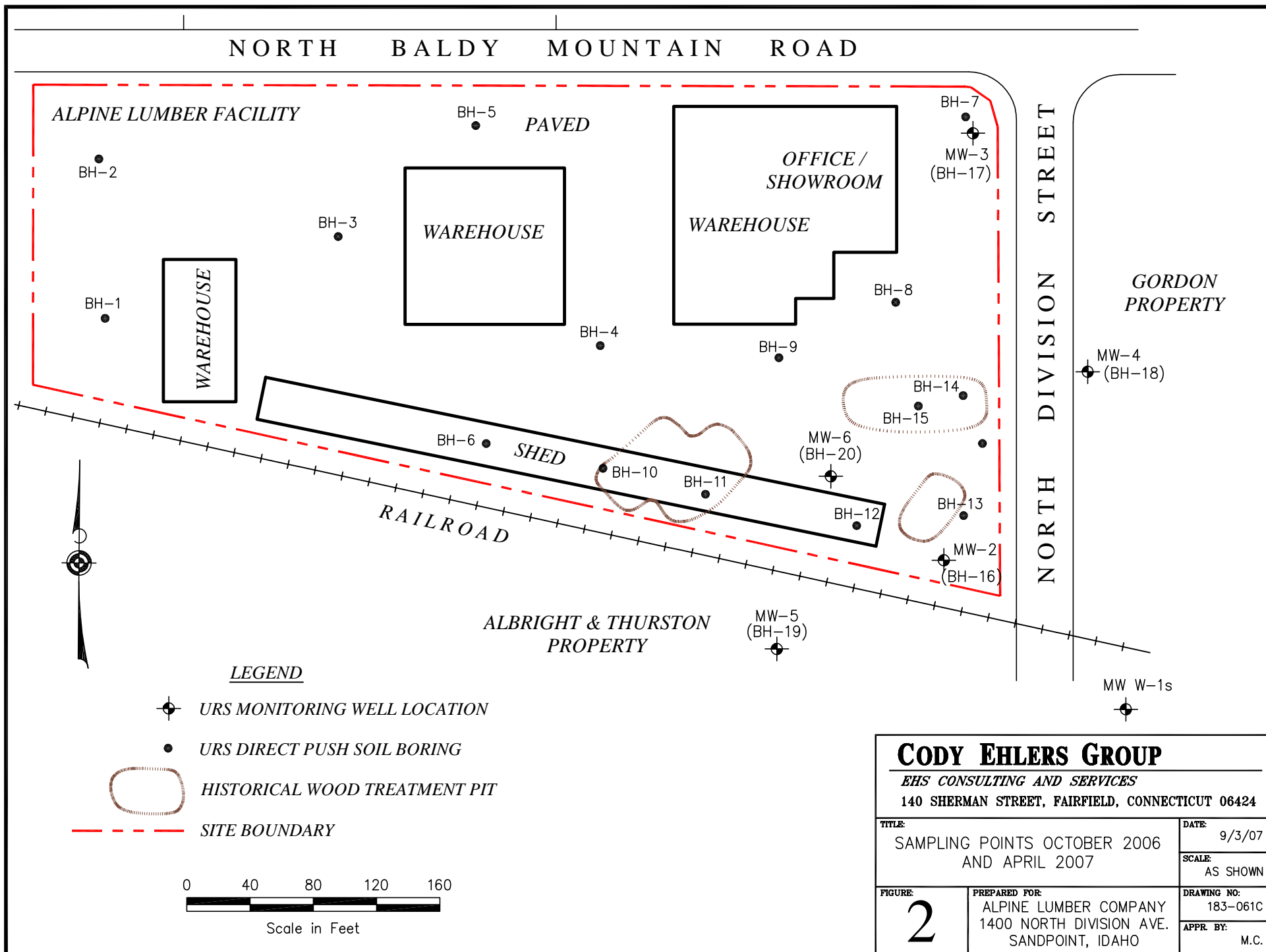
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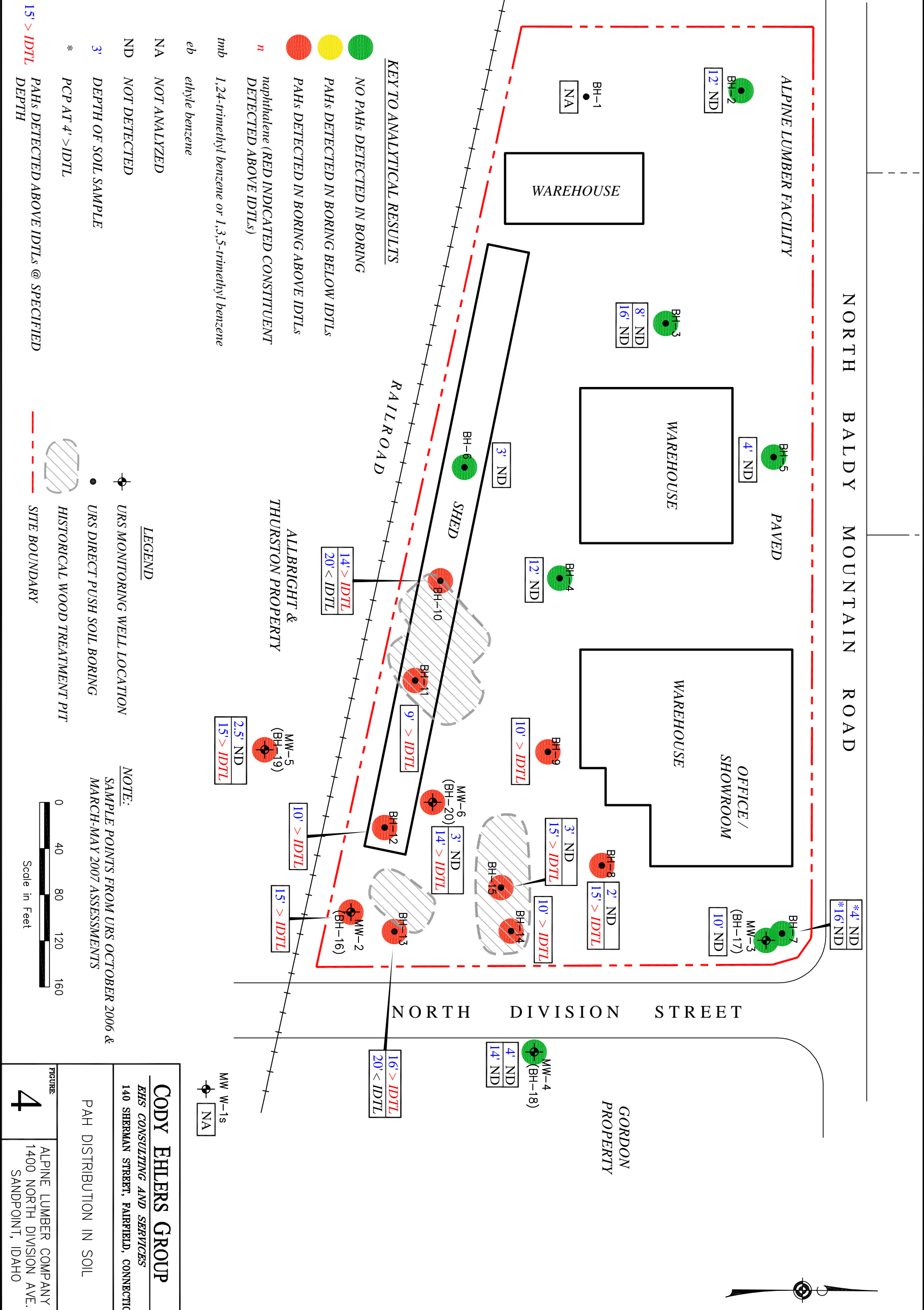
CODY EHLERS GROUP

EHS CONSULTING AND SERVICES

140 SHERMAN STREET, FAIRFIELD, CONNECTICUT 06424

TITLE: SITE LOCATION MAP		DATE: 9/3/07
FIGURE: 1		SCALE: AS SHOWN
PREPARED FOR: ALPINE LUMBER COMPANY 1400 NORTH DIVISION AVE. SANDPOINT, IDAHO		DRAWING NO: 183-061C1
		APPR. BY: M.C.





Tables

- URS October 2006 Assessment
- URS March-May 2007 Assessment

Analytical Results Summary Tables

URS October 2006 Assessment

Table 1 - Sample Summary
Limited Phase II ESA
Alpine Lumber Facility, Sandpoint Idaho

Borehole	Sample ID	Sample Depth (ft)	Matrix		Analysis				Location (lat/long)			
			Soil	Groundwater	EPA 8260B	EPA 8270 Mod.	EPA 8270C-HVI	EPA 8290	Degrees	Minutes	Degrees	Minutes
BH-1	ALF BH1 GW01	NA		x					48	17.222	-116	34.250
	ALF BH1 -8'	8	x									
	ALF BH1 -16'	16	x									
BH-2	ALF BH2 GW01	NA		x	x		x	x	48	17.240	-116	34.252
	ALF BH2 GW501	NA		x	x		x	x				
	ALF BH2 -12'	12	x		x	x						
	ALF BH2 -16'	16	x									
BH-3	ALF BH3 GW01	NA		x					48	17.233	-116	34.188
	ALF BH3 -8'	8	x		x	x						
	ALF BH3 -16'	16	x		x	x						
BH-4	ALF BH4 GW01	NA		x	x		x		48	17.222	-116	34.143
	ALF BH4 -12'	12	x		x	x						
	ALF BH4 -16'	16	x									
BH-5	ALF BH5 GW01	NA		x	x		x		48	17.242	-116	34.160
	ALF BH5 -4'	4	x		x	x						
	ALF BH5 -16'	16	x									
BH-6	ALF BH6 GW01	NA		x	x		x		48	17.213	-116	34.165
	ALF BH6 -3'	3	x		x	x		x				
	ALF BH6 -20'	20	x									
BH-7	ALF BH7 GW01	NA		x	x		x	x	48	17.242	-116	34.083
	ALF BH7 -4'	4	x		x	x		x				
	ALF BH7 -16'	16	x		x	x						
BH-8	ALF BH8 GW01	NA		x	x		x		48	17.225	-116	34.095
	ALF BH8 -2'	2	x		x	x						
	ALF BH8 -15'	15	x		x	x						
BH-9	ALF BH9 GW01	NA		x	x		x	x	48	17.218	-116	34.112
	ALF BH9 -10'	10	x		x	x						
	ALF BH9 -16'	16	x									
BH-10	ALF BH10 GW01	NA			x		x		48	17.209	-116	34.147
	ALF BH10 -14'	14	x		x	x		x				
	ALF BH10 -20'	20	x		x	x						
BH-11	ALF BH11 GW01	NA		x			x		48	17.201	-116	34.125
	ALF BH11 -9'	9	x		x	x						
	ALF BH11 -20'	20	x									
BH-12	ALF BH12 GW01	NA		x	x		x		48	17.199	-116	34.105
	ALF BH12 -12'	12	x		x	x						
	ALF BH12 -16'	16	x									

Table 1 - Sample Summary
Limited Phase II ESA
Alpine Lumber Facility, Sandpoint Idaho

Borehole	Sample ID	Sample Depth (ft)	Matrix		Analysis				Location (lat/long)			
			Soil	Groundwater	EPA 8260B	EPA 8270 Mod.	EPA 8270C-HVI	EPA 8290	Degrees	Minutes	Degrees	Minutes
BH-13	ALF BH13 GW01	NA		x	x		x		48	17.199	-116	34.085
	ALF BH13 -16'	16	x		x	x						
	ALF BH13 -20'	20	x		x	x						
BH-14	ALF BH14 GW01	NA		x	x		x		48	17.211	-116	34.086
	ALF BH14 -10'	10	x		x	x		x				
	ALF BH14 -15'	15	x									
BH-15	ALF BH15 GW01	NA		x	x		x		48	17.209	-116	34.093
	ALF BH15 -3'	3	x		x	x		x				
	ALF BH15 -15'	15	x		x	x		x				
BH-16/ MW-2	ALF MW2 GW01	NA		x	x		x	x	48	17.198	-116	34.090
	ALF BH16 -15'	15	x		x	x		x				
	ALF BH16 -20'	20	x									
BH-17/ MW-3	ALF MW3 GW01	NA		x	x		x	x	48	17.245	-116	34.083
	ALF BH17 -10'	10	x		x	x						
	ALF BH17 -20'	20	x									
NA	ALF MW-W1S GW01			x	x		x	x	48	17.180	-116	34.063

Notes:

Shaded cells indicate sample exceed applicable IDTL

Table 2 - EPA Method 8260 (VOCs) Soil Results¹
Limited Phase II ESA
Alpine Lumber Facility, Sandpoint Idaho

Analyte	IDTL ² (mg/kg)	ALFBH2-12'	ALFBH3-8'	ALFBH3-16'	ALFBH4-12'	ALFBH5-4'	ALFBH6-3'	ALFBH7-4'	ALFBH7-16'
1,1,1,2-Tetrachloroethane	0.0409	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
1,1,1-Trichloroethane	2.00	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
1,1,2,2-Tetrachloroethane	0.000915	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
1,1,2-Trichloroethane	0.0141	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
1,1-Dichloroethane	3.48	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
1,1-Dichloroethene	0.0388	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
1,1-Dichloropropene	-	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
1,2,3-Trichlorobenzene	-	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
1,2,3-Trichloropropane	0.000245	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
1,2,4-Trichlorobenzene	0.692	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
1,2,4-Trimethylbenzene	0.193	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
1,2-Dibromo-3-chloropropane	0.000975	<0.254	<0.257	<0.245	<0.258	<0.455	<0.497	<0.472	<0.248
1,2-Dibromoethane	-	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
1,2-Dichlorobenzene	5.25	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
1,2-Dichloroethane (EDC)	0.0755	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
1,2-Dichloropropane	-	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
1,3,5-Trimethylbenzene	0.145	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
1,3-Dichlorobenzene	0.229	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
1,3-Dichloropropane	-	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
1,4-Dichlorobenzene	0.0755	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
2,2-Dichloropropane	-	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
2-Butanone	11.8	<0.508	<0.513	<0.490	<0.515	<0.910	<0.994	<0.943	<0.497
2-Chlorotoluene	1.56	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
2-Hexanone	-	<0.508	<0.513	<0.490	<0.515	<0.910	<0.994	<0.943	<0.497
4-Chlorotoluene	-	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
4-Methyl-2-pentanone	17.6	<0.508	<0.513	<0.490	<0.515	<0.910	<0.994	<0.943	<0.497
Acetone	17.4	<0.508	<0.513	<0.490	<0.515	<0.910	<0.994	<0.943	<0.497
Benzene	0.0178	<0.0102	<0.0103	<0.0098	<0.0103	<0.0182	<0.0199	<0.0189	<0.0099
Bromobenzene	-	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
Bromochloromethane	-	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
Bromodichloromethane	0.00268	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
Bromoform	0.00292	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
Bromomethane	0.0501	<0.254	<0.257	<0.245	<0.258	<0.455	<0.497	<0.472	<0.248
Carbon disulfide	5.97	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
Carbon tetrachloride	0.0114	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
Chlorobenzene	0.618	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
Chloroethane	0.0533	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
Chloroform	0.00564	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
Chloromethane	0.0231	<0.254	<0.257	<0.245	<0.258	<0.455	<0.497	<0.472	<0.248
cis-1,2-Dichloroethene	0.193	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
cis-1,3-Dichloropropene	0.00245	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
Dibromochloromethane	0.00202	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
Dibromomethane	-	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
Dichlorodifluoromethane	2.96	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
Ethylbenzene	10.2	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
Hexachlorobutadiene	0.0378	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
Isopropylbenzene	3.46	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
m,p-Xylene	1.67 ⁵	<0.203	<0.205	<0.196	<0.206	<0.364	<0.397	<0.377	<0.199
Methyl tert-butyl ether	0.0364	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
Methylene chloride	0.0169	<0.508	<0.513	<0.490	<0.515	<0.910	<0.994	<0.943	<0.497
Naphthalene	1.14	<0.102	<0.103	<0.098	<0.103	<0.182	<0.199	<0.189	<0.0994
n-Butylbenzene	-	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
n-Propylbenzene	-	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
o-Xylene	1.67 ⁵	<0.102	<0.103	<0.098	<0.103	<0.182	<0.199	<0.189	<0.0994
p-Isopropyltoluene	-	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
sec-Butylbenzene	1.17	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
Styrene	1.83	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
tert-Butylbenzene	0.852	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
Tetrachloroethene	0.0288	<0.0152	<0.0154	<0.0147	<0.0155	<0.0273	<0.0298	<0.0283	<0.0149
Toluene	4.89	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
trans-1,2-Dichloroethene	0.365	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
trans-1,3-Dichloropropene	0.00245	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
Trichloroethene	0.00288	<0.0152	<0.0154	<0.0147	<0.0155	<0.0273	<0.0298	<0.0283	<0.0149
Trichlorofluoromethane	10.4	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497
Vinyl chloride	0.00963	<0.0508	<0.0513	<0.0490	<0.0515	<0.0910	<0.0994	<0.0943	<0.0497

Notes:

1. All results reported in mg/kg.
2. Initial Default Target Levels (IDTL) from Idaho Risk Evaluation Manual, July 2004
3. Bold values exceed the IDTL
4. Results for ALBH8-15' and ALF10-20' are estimated values. Use for qualitative purposes only.
5. ITDL for total Xylenes
6. - indicates there is no IDTL for the analyte

Table 2 - EPA Method 8260 (VOCs) Soil Results¹
Limited Phase II ESA
Alpine Lumber Facility, Sandpoint Idaho

Analyte	IDTL ² (mg/kg)	ALFBH8-2'	ALFBH8-15' ⁴	ALFBH9-10'	ALFBH10-14'	ALFBH10-20' ⁴	ALFBH11-9'	ALFBH12-12'	ALFBH13-16'
1,1,1,2-Tetrachloroethane	0.0409	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
1,1,1-Trichloroethane	2.00	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
1,1,2,2-Tetrachloroethane	0.000915	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
1,1,2-Trichloroethane	0.0141	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
1,1-Dichloroethane	3.48	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
1,1-Dichloroethene	0.0388	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
1,1-Dichloropropene	-	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
1,2,3-Trichlorobenzene	-	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
1,2,3-Trichloropropane	0.000245	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
1,2,4-Trichlorobenzene	0.692	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
1,2,4-Trimethylbenzene	0.193	<0.0567	<0.0526	0.417	0.283	<0.0508	<0.18	<1.26	<1.27
1,2-Dibromo-3-chloropropane	0.000975	<0.284	<0.263	<0.252	<0.474	<0.254	<0.488	<6.32	<6.37
1,2-Dibromoethane	-	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
1,2-Dichlorobenzene	5.25	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
1,2-Dichloroethane (EDC)	0.0755	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
1,2-Dichloropropane	-	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
1,3,5-Trimethylbenzene	0.145	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
1,3-Dichlorobenzene	0.229	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
1,3-Dichloropropane	-	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
1,4-Dichlorobenzene	0.0755	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
2,2-Dichloropropane	-	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
2-Butanone	11.8	<0.567	<0.526	<0.505	<0.948	<0.508	<0.976	<12.6	<12.7
2-Chlorotoluene	1.56	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
2-Hexanone	-	<0.567	<0.526	<0.505	<0.948	<0.508	<0.976	<12.6	<12.7
4-Chlorotoluene	-	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
4-Methyl-2-pentanone	17.6	<0.567	<0.526	<0.505	<0.948	<0.508	<0.976	<12.6	<12.7
Acetone	17.4	<0.567	<0.526	<0.505	<0.948	<0.508	<0.976	<12.6	<12.7
Benzene	0.0178	<0.0113	<0.0105	<0.0101	<0.0190	<0.0102	<0.0195	<0.25	<0.26
Bromobenzene	-	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
Bromochloromethane	-	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
Bromodichloromethane	0.00268	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
Bromoform	0.0292	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
Bromomethane	0.0501	<0.284	<0.263	<0.252	<0.474	<0.254	<0.488	<6.32	<6.37
Carbon disulfide	5.97	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
Carbon tetrachloride	0.0114	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
Chlorobenzene	0.618	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
Chloroethane	0.0533	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
Chloroform	0.00564	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
Chloromethane	0.0231	<0.284	<0.263	<0.252	<0.474	<0.254	<0.488	<6.32	<6.37
cis-1,2-Dichloroethene	0.193	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
cis-1,3-Dichloropropene	0.00245	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
Dibromochloromethane	0.00202	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
Dibromomethane	-	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
Dichlorodifluoromethane	2.96	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
Ethylbenzene	10.2	<0.0567	<0.0526	0.0543	<0.0948	<0.0508	<0.0976	<1.26	<1.27
Hexachlorobutadiene	0.0378	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
Isopropylbenzene	3.46	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
m,p-Xylene	1.67 ⁵	<0.227	<0.210	<0.202	<0.379	<0.203	<0.390	<5.06	<5.10
Methyl tert-butyl ether	0.0364	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
Methylene chloride	0.0169	<0.567	<0.526	<0.505	<0.948	<0.508	<0.976	<12.6	<12.7
Naphthalene	1.14	0.276	4.51	171	264	0.338	86.2	20.9	2.42
n-Butylbenzene	-	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
n-Propylbenzene	-	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
o-Xylene	1.67 ⁵	<0.113	<0.105	<0.101	<0.190	<0.102	<0.195	<2.53	<2.55
p-Isopropyltoluene	-	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
sec-Butylbenzene	1.17	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
Styrene	1.83	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
tert-Butylbenzene	0.852	<0.0567	<0.0526	0.0581	<0.0948	<0.0508	<0.0976	<1.26	<1.27
Tetrachloroethene	0.0288	<0.0170	<0.0158	<0.0151	<0.0284	<0.0152	<0.0293	<0.38	<0.38
Toluene	4.89	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
trans-1,2-Dichloroethene	0.365	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
trans-1,3-Dichloropropene	0.00245	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
Trichloroethene	0.00288	<0.0170	<0.0158	<0.0151	<0.0284	<0.0152	<0.0293	<0.38	<0.38
Trichlorofluoromethane	10.4	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27
Vinyl chloride	0.00963	<0.0567	<0.0526	<0.0505	<0.0948	<0.0508	<0.0976	<1.26	<1.27

Notes:

- All results reported in mg/kg.
- Initial Default Target Levels (IDTL) from Idaho Risk Evaluation Manual, July 2004
- Bold values exceed the IDTL
- Results for ALBH8-15' and ALF10-20' are estimated values. Use for qualitative purposes only.
- IDTL for total Xylenes
- indicates there is no IDTL for the analyte

Table 2 - EPA Method 8260 (VOCs) Soil Results¹
Limited Phase II ESA
Alpine Lumber Facility, Sandpoint Idaho

Analyte	IDTL ² (mg/kg)	ALFBH13-20'	ALFBH14-10'	ALFBH15-3'	ALFBH15-15'	ALFBH16-15'	ALFBH17-10'
1,1,1,2-Tetrachloroethane	0.0409	<0.132	<0.125	<0.128	<1.25	<0.133	<0.133
1,1,1-Trichloroethane	2.00	<0.132	<0.125	<0.128	<1.25	<0.133	<0.133
1,1,2,2-Tetrachloroethane	0.000915	<0.132	<0.125	<0.128	<1.25	<0.133	<0.133
1,1,2-Trichloroethane	0.0141	<0.132	<0.125	<0.128	<1.25	<0.133	<0.133
1,1-Dichloroethane	3.48	<0.132	<0.125	<0.128	<1.25	<0.133	<0.133
1,1-Dichloroethene	0.0388	<0.132	<0.125	<0.128	<1.25	<0.133	<0.133
1,1-Dichloropropene	-	<0.132	<0.125	<0.128	<1.25	<0.133	<0.133
1,2,3-Trichlorobenzene	-	<0.132	<0.125	<0.128	<1.25	<0.133	<0.133
1,2,3-Trichloropropane	0.000245	<0.132	<0.125	<0.128	<1.25	<0.133	<0.133
1,2,4-Trichlorobenzene	0.692	<0.132	<0.125	<0.128	<1.25	<0.133	<0.133
1,2,4-Trimethylbenzene	0.193	<0.132	<0.125	<0.128	<1.25	<0.133	<0.133
1,2-Dibromo-3-chloropropane	0.000975	<0.661	<0.623	<0.641	<6.26	<0.665	<0.665
1,2-Dibromoethane	-	<0.132	<0.125	<0.128	<1.25	<0.133	<0.133
1,2-Dichlorobenzene	5.25	<0.132	<0.125	<0.128	<1.25	<0.133	<0.133
1,2-Dichloroethane (EDC)	0.0755	<0.132	<0.125	<0.128	<1.25	<0.133	<0.133
1,2-Dichloropropane	-	<0.132	<0.125	<0.128	<1.25	<0.133	<0.133
1,3,5-Trimethylbenzene	0.145	<0.132	<0.125	<0.128	<1.25	<0.133	<0.133
1,3-Dichlorobenzene	0.229	<0.132	<0.125	<0.128	<1.25	<0.133	<0.133
1,3-Dichloropropane	-	<0.132	<0.125	<0.128	<1.25	<0.133	<0.133
1,4-Dichlorobenzene	0.0755	<0.132	<0.125	<0.128	<1.25	<0.133	<0.133
2,2-Dichloropropane	-	<0.132	<0.125	<0.128	<1.25	<0.133	<0.133
2-Butanone	11.8	<1.32	<1.25	<1.28	<12.5	<1.33	<1.33
2-Chlorotoluene	1.56	<0.132	<0.125	<0.128	<1.25	<0.133	<0.133
2-Hexanone	-	<1.32	<1.25	<1.280	<12.5	<1.33	<1.33
4-Chlorotoluene	-	<0.132	<0.125	<0.128	<1.25	<0.133	<0.133
4-Methyl-2-pentanone	17.6	<1.32	<0.623	<0.641	<12.5	<1.33	<1.33
Acetone	17.4	<1.32	<3.12	<3.20	<12.5	<1.33	<1.33
Benzene	0.0178	<0.026	<0.025	<0.026	<0.250	<0.027	<0.027
Bromobenzene	-	<0.132	<0.125	<0.128	<1.25	<0.133	<0.133
Bromochloromethane	-	<0.132	<0.125	<0.128	<1.25	<0.133	<0.133
Bromodichloromethane	0.00268	<0.132	<0.125	<0.128	<1.25	<0.133	<0.133
Bromoform	0.0292	<0.132	<0.125	<0.128	<1.25	<0.133	<0.133
Bromomethane	0.0501	<0.661	<0.623	<0.641	<6.26	<0.665	<0.665
Carbon disulfide	5.97	<0.132	<1.250	<1.280	<1.25	<0.133	<0.133
Carbon tetrachloride	0.0114	<0.132	<0.125	<0.128	<1.25	<0.133	<0.133
Chlorobenzene	0.618	<0.132	<0.125	<0.128	<1.25	<0.133	<0.133
Chloroethane	0.0533	<0.132	<0.125	<0.128	<1.25	<0.133	<0.133
Chloroform	0.00564	<0.132	<0.125	<0.128	<1.25	<0.133	<0.133
Chloromethane	0.0231	<0.661	<0.623	<0.641	<6.26	<0.665	<0.665
cis-1,2-Dichloroethene	0.193	<0.132	<0.125	<0.128	<1.25	<0.133	<0.133
cis-1,3-Dichloropropene	0.00245	<0.132	<0.125	<0.128	<1.25	<0.133	<0.133
Dibromochloromethane	0.00202	<0.132	<0.125	<0.128	<1.25	<0.133	<0.133
Dibromomethane	-	<0.132	<0.125	<0.128	<1.25	<0.133	<0.133
Dichlorodifluoromethane	2.96	<0.132	<0.623	<0.641	<1.25	<0.133	<0.133
Ethylbenzene	10.2	<0.132	<0.125	<0.128	<1.25	<0.133	<0.133
Hexachlorobutadiene	0.0378	<0.132	<0.499	<0.513	<1.25	<0.133	<0.133
Isopropylbenzene	3.46	<0.132	<0.249	<0.256	<1.25	<0.133	<0.133
m,p-Xylene	1.67 ⁵	<0.528	<0.249	<0.256	<5.01	<0.532	<0.532
Methyl tert-butyl ether	0.0364	<0.132	<0.125	<0.128	<1.25	<0.133	<0.133
Methylene chloride	0.0169	<1.32	<0.623	<0.641	<12.5	<1.33	<1.33
Naphthalene	1.14	<0.264	<0.249	<0.256	46.8	5.23	0.387
n-Butylbenzene	-	<0.132	<0.623	<0.641	<1.25	<0.133	<0.133
n-Propylbenzene	-	<0.132	<0.125	<0.128	<1.25	<0.133	<0.133
o-Xylene	1.67 ⁵	<0.264	<0.125	<0.128	<2.50	<0.266	<0.266
p-Isopropyltoluene	-	<0.132	<0.249	<0.256	<1.25	<0.133	<0.133
sec-Butylbenzene	1.17	<0.132	<0.125	<0.128	<1.25	<0.133	<0.133
Styrene	1.83	<0.132	<0.125	<0.128	<1.25	<0.133	<0.133
tert-Butylbenzene	0.852	<0.132	<0.125	<0.128	<1.25	<0.133	<0.133
Tetrachloroethene	0.0288	<0.040	<0.125	<0.128	<0.38	<0.040	<0.040
Toluene	4.89	<0.132	<0.125	<0.128	<1.25	<0.133	<0.133
trans-1,2-Dichloroethene	0.365	<0.132	<0.125	<0.128	<1.25	<0.133	<0.133
trans-1,3-Dichloropropene	0.00245	<0.132	<0.125	<0.128	<1.25	<0.133	<0.133
Trichloroethene	0.00288	<0.040	<0.125	<0.128	<0.38	<0.040	<0.040
Trichlorofluoromethane	10.4	<0.132	<0.125	<0.128	<1.25	<0.133	<0.133
Vinyl chloride	0.00963	<0.132	<0.125	<0.128	<1.25	<0.133	<0.133

Notes:

1. All results reported in mg/kg.
2. Initial Default Target Levels (IDTL) from Idaho Risk Evaluation Manual, July 2004
3. Bold values exceed the IDTL
4. Results for ALBH8-15' and ALF10-20' are estimated values. Use for qualitative purposes only.
5. ITDL for total Xylenes
6. - indicates there is no IDTL for the analyte

Table 3 - EPA Method 8270 (PAHs/PCP) Soil Results¹
Limited Phase II ESA
Alpine Lumber Facility, Sandpoint Idaho

Parameter	IDTL (ug/kg) ²	ALFBH2-12'	ALFBH3-8'	ALFBH3-16'	ALFBH4-12'	ALFBH5-4'	ALFBH6-3'	ALFBH7-4'	ALFBH7-16'
2-Methylnaphthalene	3310	<17.5	<18.8	<16.8	<16.8	<15.8	<16.3	<16.1	<17.2
Acenaphthene	52300	<17.5	<18.8	<16.8	<16.8	<15.8	<16.3	<16.1	<17.2
Acenaphthylene	78000	<17.5	<18.8	<16.8	<16.8	<15.8	<16.3	<16.1	<17.2
Anthracene	1040000	<17.5	<18.8	<16.8	<16.8	<15.8	<16.3	<16.1	<17.2
Benzo(a)anthracene	422	<17.5	<18.8	<16.8	<16.8	<15.8	17.5	<16.1	<17.2
Benzo(a)pyrene	42.2	<17.5	<18.8	<16.8	<16.8	<15.8	17.7	<16.1	<17.2
Benzo(b)fluoranthene	422	<17.5	<18.8	<16.8	<16.8	<15.8	20.4	<16.1	<17.2
Benzo(ghi)perylene	1180000	<17.5	<18.8	<16.8	<16.8	<15.8	<16.3	<16.1	<17.2
Benzo(k)fluoranthene	4220	<17.5	<18.8	<16.8	<16.8	<15.8	22.9	<16.1	<17.2
Chrysene	33400	<17.5	<18.8	<16.8	<16.8	<15.8	35.8	<16.1	<17.2
Dibenzo(a,h)anthracene	42.2	<17.5	<18.8	<16.8	<16.8	<15.8	<16.3	<16.1	<17.2
Fluoranthene	364000	<17.5	<18.8	<16.8	<16.8	<15.8	<16.3	<16.1	<17.2
Fluorene	54800	<17.5	<18.8	<16.8	<16.8	<15.8	<16.3	<16.1	<17.2
Indeno(1,2,3-cd)pyrene	422	<17.5	<18.8	<16.8	<16.8	<15.8	<16.3	<16.1	<17.2
Naphthalene	1140	<17.5	<18.8	<16.8	<16.8	<15.8	<16.3	<16.1	<17.2
Pentachlorophenol	9.07	<87.3	<94.0	<84.1	<83.9	<79.1	<81.7	443	<86.1
Phenanthrene	79000	<17.5	<18.8	<16.8	<16.8	<15.8	<16.3	<16.1	<17.2
Pyrene	359000	<17.5	<18.8	<16.8	<16.8	<15.8	17.6	<16.1	<17.2

Notes:

1. All results reported in ug/kg
2. Initial Default Target Levels (IDTL) from Idaho Risk Evaluation Manual, July 2004

Table 3 - EPA Method 8270 (PAHs/PCP) Soil Results¹
Limited Phase II ESA
Alpine Lumber Facility, Sandpoint Idaho

Parameter	IDTL (ug/kg)²	ALFBH8-2'	ALFBH8-15'	ALFBH9-10'	ALFBH10-14'	ALFBH10-20'	ALFBH11-9'	ALFBH12-12'
2-Methylnaphthalene	3310	<16.6	253	31800	5800	<17.2	54700	12300
Acenaphthene	52300	<16.6	1640	69100	11700	<17.2	99400	29000
Acenaphthylene	78000	<16.6	<170	<1710	<839	<17.2	<1740	<871
Anthracene	1040000	<16.6	598	14300	2930	<17.2	32100	7170
Benzo(a)anthracene	422	<16.6	1070	19000	5510	<17.2	41200	12000
Benzo(a)pyrene	42.2	<16.6	569	9160	3330	<17.2	24800	7330
Benzo(b)fluoranthene	422	<16.6	560	8690	3130	<17.2	23600	6930
Benzo(ghi)perylene	1180000	<16.6	175	2410	1080	<17.2	8340	2470
Benzo(k)fluoranthene	4220	<16.6	595	9480	3530	<17.2	24400	7380
Chrysene	33400	<16.6	763	16600	3490	<17.2	36400	8330
Dibenzo(a,h)anthracene	42.2	<16.6	<170	<1710	<839	<17.2	3190	916
Fluoranthene	364000	<16.6	4590	84100	20400	<17.2	169000	50100
Fluorene	54800	<16.6	1950	55600	9580	<17.2	58300	22400
Indeno(1,2,3-cd)pyrene	422	<16.6	174	2540	1060	<17.2	8400	2470
Naphthalene	1140	<16.6	364	79000	14200	<17.2	142000	23200
Pentachlorophenol	9.07	<83.0	<849	<8570	<4190	<86.0	<8690	<4360
Phenanthrene	79000	<16.6	8280	206000	38700	22.3	323000	98500
Pyrene	359000	<16.6	3490	71200	18000	<17.2	121000	35800

Notes:

1. All results reported in ug/kg
2. Initial Default Target Levels (IDTL) from Idaho Risk Evaluation Manual, July 2004

Table 3 - EPA Method 8270 (PAHs/PCP) Soil Results¹
Limited Phase II ESA
Alpine Lumber Facility, Sandpoint Idaho

Parameter	IDTL (ug/kg) ²	ALFBH13-16'	ALFBH13-20'	ALFBH14-10'	ALFBH15-3'	ALFBH15-15'	ALFBH16-15'	ALFBH17-10'
2-Methylnaphthalene	3310	<168	<18	<172	<875	1040	<17.5	<17.4
Acenaphthene	52300	5750	31.5	6370	<875	1710	334	<17.4
Acenaphthylene	78000	<168	<18	<172	<875	<167	<17.5	<17.4
Anthracene	1040000	1820	176	2420	<875	801	156	<17.4
Benzo(a)anthracene	422	2780	23.3	4070	<875	831	301	<17.4
Benzo(a)pyrene	42.2	1640	<18	2060	1180	462	187	<17.4
Benzo(b)fluoranthene	422	1630	<18	2080	1660	460	191	<17.4
Benzo(ghi)perylene	1180000	573	<18	692	1180	<167	66.9	<17.4
Benzo(k)fluoranthene	4220	1640	<18	2260	1390	473	180	<17.4
Chrysene	33400	2050	<18	3630	1880	744	183	<17.4
Dibenzo(a,h)anthracene	42.2	217	<18	271	<875	<167	25	<17.4
Fluoranthene	364000	11800	108	18800	<875	3790	1270	<17.4
Fluorene	54800	5500	38.9	7410	<875	1810	414	<17.4
Indeno(1,2,3-cd)pyrene	422	564	<18	699	1110	<167	66.4	<17.4
Naphthalene	1140	179	27	<172	<875	3100	<17.5	<17.4
Pentachlorophenol	9.07	<842	<89	<859	<4370	<834	<87.7	<87.0
Phenanthrene	79000	23900	190	34900	<875	8910	2240	<17.4
Pyrene	359000	8820	75.2	13100	<875	2830	926	<17.4

Notes:

1. All results reported in ug/kg
2. Initial Default Target Levels (IDTL) from Idaho Risk Evaluation Manual, July 2004

Table 4 - EPA Method 8290 (Dioxins/Furans) Soil Results¹
Limited Phase II ESA
Alpine Lumber Facility, Sandpoint Idaho

Parameter Description	TEF ²	ALFBH6-3'		ALFBH7-4'		ALFBH10-14'		ALFBH14-10'	
		Result	TEF Factor ³	Result	TEF Factor	Result	TEF Factor	Result	TEF Factor
1,2,3,4,6,7,8-Hepta CDD	0.01	7.20	0.072	7550	75.5	90.7	0.907	2.55	0.0255
1,2,3,4,6,7,8-Hepta CDF	0.01	<2.00	0.01	2680	26.8	<9.00	0.045	<29.00	0.145
1,2,3,4,7,8,9-Hepta CDF	0.01	<0.24	0.0012	115	1.15	0.79	0.0079	<0.51	0.00255
1,2,3,4,7,8-Hexa CDD	0.1	<0.17	0.0085	5.82	0.582	<0.51	0.0255	<0.56	0.028
1,2,3,4,7,8-Hexa CDF	0.1	<0.18	0.009	157	15.7	1.68	0.168	<1.20	0.06
1,2,3,6,7,8-Hexa CDD	0.1	0.26	0.026	183	18.3	1.23	0.123	<0.57	0.0285
1,2,3,6,7,8-Hexa CDF	0.1	<0.17	0.0085	19.5	1.95	0.66	0.066	<0.45	0.0225
1,2,3,7,8,9-Hexa CDD	0.1	<0.16	0.008	23.2	2.32	<0.48	0.024	<0.53	0.0265
1,2,3,7,8,9-Hexa CDF	0.1	<0.22	0.011	1.88	0.188	<0.53	0.0265	<0.57	0.0285
1,2,3,7,8-Penta CDD	1	<0.22	0.11	2.9	2.9	<0.49	0.245	<0.94	0.47
1,2,3,7,8-Penta CDF	0.05	<0.21	0.00525	6.3	0.315	<0.45	0.01125	<0.98	0.0245
2,3,4,6,7,8-Hexa CDF	0.1	<0.20	0.01	23.4	2.34	0.59	0.059	<0.51	0.0255
2,3,4,7,8-Penta CDF	0.5	<0.21	0.0525	22.4	11.2	0.55	0.275	<1.10	0.275
2,3,7,8-Tetra CDD	1	<0.14	0.07	0.24	0.24	<0.51	0.255	<0.81	0.405
2,3,7,8-Tetra CDF	0.1	<0.20	0.01	1.24	0.124	2.11	0.211	<0.54	0.027
Octa CDD	0.0001	80.6	0.00806	55200	5.52	860	0.086	16.7	0.00167
Octa CDF	0.0001	6.51	0.000651	11900	1.19	32.7	0.00327	1.16	0.000116
Total Hepta CDD	N/A	15.5		14300		314		9.59	
Total Hepta CDF	N/A	4.67		14300		22.7		<29.00	
Total Hexa CDD	N/A	1.13		556		13.6		<4.50	
Total Hexa CDF	N/A	1.15		2700		10.9		<1.20	
Total Penta CDD	N/A	<0.22		26.3		7.06		<0.94	
Total Penta CDF	N/A	0.33		208		3.35		<1.20	
Total Tetra CDD	N/A	<0.14		6.66		14.5		2.33	
Total Tetra CDF	N/A	<0.20		4.14		8.91		<0.87	
	ITDL ⁴ (pg/g)								
2,3,7,8-TCDD	3.9064		0.420661		165.129		2.53515		1.59572

Notes:

1. All results reported in picograms per gram (pg/g)
2. Toxic Equivalency Factors (TEF) as defined in the Idaho Risk Evaluation Manual Appendix N.
3. The TEF Factor is the product of the sample result and the TEF value. One half the detection limit was used for non-detectable analytes.
4. Initial Default Target Levels (IDTL) from Idaho Risk Evaluation Manual, July 2004. The sum of the TEF Factors for each parameter are compared to the IDTL for 2,3,7,8-TCDD. **Bold values exceed the IDTL.**

Table 4 - EPA Method 8290 (Dioxins/Furans) Soil Results¹
Limited Phase II ESA
Alpine Lumber Facility, Sandpoint Idaho

Parameter Description	TEF ²	ALFBH15-3'		ALFBH15-15'		ALFBH16-15'	
		Result	TEF Factor	Result	TEF Factor	Result	TEF Factor
1,2,3,4,6,7,8-Hepta CDD	0.01	4.85	0.0485	196	1.96	1.61	0.0161
1,2,3,4,6,7,8-Hepta CDF	0.01	<2.60	0.013	<9.20	0.046	<0.85	0.00425
1,2,3,4,7,8,9-Hepta CDF	0.01	<0.36	0.0018	<0.35	0.00175	<0.21	0.00105
1,2,3,4,7,8-Hexa CDD	0.1	0.34	0.034	<0.17	0.0085	<0.19	0.0095
1,2,3,4,7,8-Hexa CDF	0.1	0.67	0.067	0.58	0.058	0.16	0.016
1,2,3,6,7,8-Hexa CDD	0.1	0.7	0.07	1.65	0.165	<0.19	0.0095
1,2,3,6,7,8-Hexa CDF	0.1	<0.31	0.0155	<0.12	0.006	<0.13	0.0065
1,2,3,7,8,9-Hexa CDD	0.1	0.97	0.097	<0.41	0.0205	<0.18	0.009
1,2,3,7,8,9-Hexa CDF	0.1	1.65	0.165	<0.16	0.008	<0.16	0.008
1,2,3,7,8-Penta CDD	1	0.44	0.44	<0.18	0.09	<0.21	0.105
1,2,3,7,8-Penta CDF	0.05	0.45	0.0225	<0.20	0.005	<0.17	0.00425
2,3,4,6,7,8-Hexa CDF	0.1	0.95	0.095	<0.14	0.007	<0.15	0.0075
2,3,4,7,8-Penta CDF	0.5	1.02	0.51	<0.21	0.0525	<0.17	0.0425
2,3,7,8-Tetra CDD	1	<0.29	0.145	<0.18	0.09	<0.20	0.1
2,3,7,8-Tetra CDF	0.1	0.82	0.082	<0.15	0.0075	<0.17	0.0085
Octa CDD	0.0001	30.2	0.00302	1340	0.134	9.76	0.000976
Octa CDF	0.0001	1.93	0.000193	46.1	0.00461	<0.23	0.0000115
Total Hepta CDD	N/A	9.08		681		3.52	
Total Hepta CDF	N/A	1.44		34.3		<0.85	
Total Hexa CDD	N/A	3.18		40.2		0.9	
Total Hexa CDF	N/A	11.4		7.97		0.16	
Total Penta CDD	N/A	0.44		<0.24		<0.21	
Total Penta CDF	N/A	14.5		2.02		0.22	
Total Tetra CDD	N/A	<0.29		<0.18		0.77	
Total Tetra CDF	N/A	7.34		<0.51		<0.17	
	ITDL ⁴ (pg/g)						
2,3,7,8-TCDD	3.9064		1.80932		2.65975		0.348626

Notes:

1. All results reported in picograms per gram (pg/g)
2. Toxic Equivalency Factors (TEF) as defined in the Idaho Risk Evaluation Manual Appendix N.
3. The TEF Factor is the product of the sample result and the TEF value. One half the detection limit was used for non-detectable analytes.
4. Initial Default Target Levels (IDTL) from Idaho Risk Evaluation Manual, July 2004. The sum of the TEF Factors for each parameter are compared to the IDTL for 2,3,7,8-TCDD. **Bold values exceed the IDTL.**

Table 5 - EPA Method 8260 (VOCs) Groundwater Results¹

Limited Phase II ESA
Alpine Lumber Facility, Sandpoint Idaho

Parameter	IDTL (ug/L) ²	ALFBH2 GW01	ALFBH2 GW501	ALFBH4 GW01	ALFBH5 GW01	ALFBH6 GW01	ALFBH7 GW01
1,1,1,2-Tetrachloroethane	2.15	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,1,1-Trichloroethane	200	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,1,2,2-Tetrachloroethane	0.279	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,1,2-Trichloroethane	5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,1-Dichloroethane	1040	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,1-Dichloroethene	7.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,1-Dichloropropene	-	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,2,3-Trichlorobenzene	-	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,2,3-Trichloropropane	0.0279	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,2,4-Trichlorobenzene	70.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,2,4-Trimethylbenzene	439.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,2-Dibromo-3-chloropropane	0.200	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
1,2-Dibromoethane	-	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,2-Dichlorobenzene	600	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,2-Dichloroethane (EDC)	5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,2-Dichloropropane	5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,3,5-Trimethylbenzene	304	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,3-Dichlorobenzene	9.39	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,3-Dichloropropane	-	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,4-Dichlorobenzene	75.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
2,2-Dichloropropane	-	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
2-Butanone	6260	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
2-Chlorotoluene	209	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
2-Hexanone	209	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
4-Chlorotoluene	-	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
4-Methyl-2-pentanone	8970	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Acetone	9390	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
Benzene	5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Bromobenzene	-	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Bromochloromethane	-	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Bromodichloromethane	0.901	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Bromoform	7.07	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Bromomethane	14.6	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Carbon disulfide	1040	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Carbon tetrachloride	4.56	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chlorobenzene	100	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chloroethane	19.3	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chloroform	1.80	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chloromethane	4.30	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
cis-1,2-Dichloroethene	70.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
cis-1,3-Dichloropropene	0.559	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Dibromochloromethane	0.665	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Dibromomethane	-	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Dichlorodifluoromethane	195	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Ethylbenzene	700	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Hexachlorobutadiene	0.716	1.02	<1.00	<1.00	<1.00	<1.00	<1.00
Isopropylbenzene	1040	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
m,p-Xylene	4340 ⁴	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00
Methyl tert-butyl ether	16.9	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Methylene chloride	7.45	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Naphthalene	209	<2.00	<2.00	<2.00	<2.00	<2.00	5.16
n-Butylbenzene	-	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
n-Propylbenzene	-	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
o-Xylene	4340 ⁴	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
p-Isopropyltoluene	-	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
sec-Butylbenzene	104	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Styrene	100	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
tert-Butylbenzene	104	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Tetrachloroethene	5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Toluene	1000	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
trans-1,2-Dichloroethene	1000	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
trans-1,3-Dichloropropene	0.559	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Trichloroethene	3.32	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Trichlorofluoromethane	2050	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Vinyl chloride	2.00	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200

Notes:

1. All results reported in micrograms per liter (ug/L)
2. Initial Default Target Levels (IDTL) from Idaho Risk Evaluation Manual, July 2004
3. Bold values exceed the IDTL
4. ITDL for total Xylenes
5. - indicates there is no IDTL for the analyte

Table 5 - EPA Method 8260 (VOCs) Groundwater Results¹

Limited Phase II ESA
Alpine Lumber Facility, Sandpoint Idaho

Parameter	IDTL (ug/L) ²	ALFBH8GW01	ALFBH9GW01	ALFBH10GW01	ALFBH12GW01	ALFBH13GW01	ALFBH14GW01
1,1,1,2-Tetrachloroethane	2.15	<1.00	<1000	<1.00	<100	<10.0	<100
1,1,1-Trichloroethane	200	<1.00	<1000	<1.00	<100	<10.0	<100
1,1,2,2-Tetrachloroethane	0.279	<1.00	<1000	<1.00	<100	<10.0	<100
1,1,2-Trichloroethane	5.00	<1.00	<1000	<1.00	<100	<10.0	<100
1,1-Dichloroethane	1040	<1.00	<1000	<1.00	<100	<10.0	<100
1,1-Dichloroethene	7.00	<1.00	<1000	<1.00	<100	<10.0	<100
1,1-Dichloropropene	-	<1.00	<1000	<1.00	<100	<10.0	<100
1,2,3-Trichlorobenzene	-	<1.00	<1000	<1.00	<100	<10.0	<100
1,2,3-Trichloropropane	0.0279	<1.00	<1000	<1.00	<100	<10.0	<100
1,2,4-Trichlorobenzene	70.0	<1.00	<1000	<1.00	<100	<10.0	<100
1,2,4-Trimethylbenzene	439.0	<1.00	<1000	<1.00	<100	<10.0	<100
1,2-Dibromo-3-chloropropane	0.200	<5.00	<5000	<5.00	<500	<50.0	<500
1,2-Dibromoethane	-	<1.00	<1000	<1.00	<100	<10.0	<100
1,2-Dichlorobenzene	600	<1.00	<1000	<1.00	<100	<10.0	<100
1,2-Dichloroethane (EDC)	5.00	<1.00	<1000	<1.00	<100	<10.0	<100
1,2-Dichloropropane	5.00	<1.00	<1000	<1.00	<100	<10.0	<100
1,3,5-Trimethylbenzene	304	<1.00	<1000	<1.00	<100	<10.0	<100
1,3-Dichlorobenzene	9.39	<1.00	<1000	<1.00	<100	<10.0	<100
1,3-Dichloropropane	-	<1.00	<1000	<1.00	<100	<10.0	<100
1,4-Dichlorobenzene	75.0	<1.00	<1000	<1.00	<100	<10.0	<100
2,2-Dichloropropane	-	<1.00	<1000	<1.00	<100	<10.0	<100
2-Butanone	6260	<10.0	<10000	<10.0	<1000	<100	<1000
2-Chlorotoluene	209	<1.00	<1000	<1.00	<100	<10.0	<100
2-Hexanone	209	<10.0	<10000	<10.0	<1000	<100	<1000
4-Chlorotoluene	-	<1.00	<1000	<1.00	<100	<10.0	<100
4-Methyl-2-pentanone	8970	<10.0	<10000	<10.0	<1000	<100	<1000
Acetone	9390	<25.0	<25000	<25.0	<2500	<250	<2500
Benzene	5.00	<1.00	<1000	<1.00	<100	<10.0	<100
Bromobenzene	-	<1.00	<1000	<1.00	<100	<10.0	<100
Bromochloromethane	-	<1.00	<1000	<1.00	<100	<10.0	<100
Bromodichloromethane	0.901	<1.00	<1000	<1.00	<100	<10.0	<100
Bromoform	7.07	<1.00	<1000	<1.00	<100	<10.0	<100
Bromomethane	14.6	<5.00	<5000	<5.00	<500	<50.0	<500
Carbon disulfide	1040	<1.00	<1000	<1.00	<100	<10.0	<100
Carbon tetrachloride	4.56	<1.00	<1000	<1.00	<100	<10.0	<100
Chlorobenzene	100	<1.00	<1000	<1.00	<100	<10.0	<100
Chloroethane	19.3	<1.00	<1000	<1.00	<100	<10.0	<100
Chloroform	1.80	<1.00	<1000	<1.00	<100	<10.0	<100
Chloromethane	4.30	<5.00	<5000	<5.00	<500	<50.0	<500
cis-1,2-Dichloroethene	70.00	<1.00	<1000	<1.00	<100	<10.0	<100
cis-1,3-Dichloropropene	0.559	<1.00	<1000	<1.00	<100	<10.0	<100
Dibromochloromethane	0.665	<1.00	<1000	<1.00	<100	<10.0	<100
Dibromomethane	-	<1.00	<1000	<1.00	<100	<10.0	<100
Dichlorodifluoromethane	195	<1.00	<1000	<1.00	<100	<10.0	<100
Ethylbenzene	700	<1.00	<1000	<1.00	<100	<10.0	<100
Hexachlorobutadiene	0.716	<1.00	<1000	<1.00	<100	<10.0	<100
Isopropylbenzene	1040	<1.00	<1000	<1.00	<100	<10.0	<100
m,p-Xylene	4340 ⁴	<2.00	<2000	<2.00	<200	<20.0	<200
Methyl tert-butyl ether	16.9	<1.00	<1000	<1.00	<100	<10.0	<100
Methylene chloride	7.45	<10.0	<10000	<10.0	<1000	<100	<1000
Naphthalene	209	46.9	12800	11.8	4180	101	718
n-Butylbenzene	-	<1.00	<1000	<1.00	<100	<10.0	<100
n-Propylbenzene	-	<1.00	<1000	<1.00	<100	<10.0	<100
o-Xylene	4340 ⁴	<1.00	<1000	<1.00	<100	<10.0	<100
p-Isopropyltoluene	-	<1.00	<1000	<1.00	<100	<10.0	<100
sec-Butylbenzene	104	<1.00	<1000	<1.00	<100	<10.0	<100
Styrene	100	<1.00	<1000	<1.00	<100	<10.0	<100
tert-Butylbenzene	104	<1.00	<1000	<1.00	<100	<10.0	<100
Tetrachloroethene	5.00	<1.00	<1000	<1.00	<100	<10.0	<100
Toluene	1000	<1.00	<1000	<1.00	<100	<10.0	<100
trans-1,2-Dichloroethene	1000	<1.00	<1000	<1.00	<100	<10.0	<100
trans-1,3-Dichloropropene	0.559	<1.00	<1000	<1.00	<100	<10.0	<100
Trichloroethene	3.32	<1.00	<1000	<1.00	<100	<10.0	<100
Trichlorofluoromethane	2050	<1.00	<1000	<1.00	<100	<10.0	<100
Vinyl chloride	2.00	<0.200	<200	<0.200	<20.0	<2.000	<20.0

Notes:

- All results reported in micrograms per liter (ug/L)
- Initial Default Target Levels (IDTL) from Idaho Risk Evaluation Manual, July 2004
- Bold values exceed the IDTL
- ITDL for total Xylenes
- indicates there is no IDTL for the analyte

Table 5 - EPA Method 8260 (VOCs) Groundwater Results¹
Limited Phase II ESA
Alpine Lumber Facility, Sandpoint Idaho

Parameter	IDTL (ug/L) ²	ALFBH15 GW01	ALFMW3 GW01	ALFMW-W1S GW01	ALFMW2 GW01
1,1,1,2-Tetrachloroethane	2.15	<20000	<1.00	<1.00	<1.00
1,1,1-Trichloroethane	200	<20000	<1.00	<1.00	<1.00
1,1,2,2-Tetrachloroethane	0.279	<20000	<1.00	<1.00	<1.00
1,1,2-Trichloroethane	5.00	<20000	<1.00	<1.00	<1.00
1,1-Dichloroethane	1040	<20000	<1.00	<1.00	<1.00
1,1-Dichloroethene	7.00	<20000	<1.00	<1.00	<1.00
1,1-Dichloropropene	-	<20000	<1.00	<1.00	<1.00
1,2,3-Trichlorobenzene	-	<20000	<1.00	<1.00	<1.00
1,2,3-Trichloropropane	0.0279	<20000	<1.00	<1.00	<1.00
1,2,4-Trichlorobenzene	70.0	<20000	<1.00	<1.00	<1.00
1,2,4-Trimethylbenzene	439.0	<20000	<1.00	<1.00	<1.00
1,2-Dibromo-3-chloropropane	0.200	<100000	<5.00	<5.00	<5.00
1,2-Dibromoethane	-	<20000	<1.00	<1.00	<1.00
1,2-Dichlorobenzene	600	<20000	<1.00	<1.00	<1.00
1,2-Dichloroethane (EDC)	5.00	<20000	<1.00	<1.00	<1.00
1,2-Dichloropropane	5.00	<20000	<1.00	<1.00	<1.00
1,3,5-Trimethylbenzene	304	<20000	<1.00	<1.00	<1.00
1,3-Dichlorobenzene	9.39	<20000	<1.00	<1.00	<1.00
1,3-Dichloropropane	-	<20000	<1.00	<1.00	<1.00
1,4-Dichlorobenzene	75.0	<20000	<1.00	<1.00	<1.00
2,2-Dichloropropane	-	<20000	<1.00	<1.00	<1.00
2-Butanone	6260	<200000	<10.0	<10.0	<10.0
2-Chlorotoluene	209	<20000	<1.00	<1.00	<1.00
2-Hexanone	209	<200000	<10.0	<10.0	<10.0
4-Chlorotoluene	-	<20000	<1.00	<1.00	<1.00
4-Methyl-2-pentanone	8970	<200000	<10.0	<10.0	<10.0
Acetone	9390	<500000	<25.0	<25.0	<25.0
Benzene	5.00	<20000	<1.00	<1.00	<1.00
Bromobenzene	-	<20000	<1.00	<1.00	<1.00
Bromochloromethane	-	<20000	<1.00	<1.00	<1.00
Bromodichloromethane	0.901	<20000	<1.00	<1.00	<1.00
Bromoform	7.07	<20000	<1.00	<1.00	<1.00
Bromomethane	14.6	<100000	<5.00	<5.00	<5.00
Carbon disulfide	1040	<20000	<1.00	<1.00	<1.00
Carbon tetrachloride	4.56	<20000	<1.00	<1.00	<1.00
Chlorobenzene	100	<20000	<1.00	<1.00	<1.00
Chloroethane	19.3	<20000	<1.00	<1.00	<1.00
Chloroform	1.80	<20000	<1.00	<1.00	<1.00
Chloromethane	4.30	<100000	<5.00	<5.00	<5.00
cis-1,2-Dichloroethene	70.00	<20000	<1.00	<1.00	<1.00
cis-1,3-Dichloropropene	0.559	<20000	<1.00	<1.00	<1.00
Dibromochloromethane	0.665	<20000	<1.00	<1.00	<1.00
Dibromomethane	-	<20000	<1.00	<1.00	<1.00
Dichlorodifluoromethane	195	<20000	<1.00	<1.00	<1.00
Ethylbenzene	700	<20000	<1.00	<1.00	<1.00
Hexachlorobutadiene	0.716	<20000	<1.00	<1.00	<1.00
Isopropylbenzene	1040	<20000	<1.00	<1.00	<1.00
m,p-Xylene	4340 ⁴	<40000	<2.00	<2.00	<2.00
Methyl tert-butyl ether	16.9	<20000	<1.00	<1.00	<1.00
Methylene chloride	7.45	<200000	<10.0	<10.0	<10.0
Naphthalene	209	166000	10.7	2.00	10.8
n-Butylbenzene	-	<20000	<1.00	<1.00	<1.00
n-Propylbenzene	-	<20000	<1.00	<1.00	<1.00
o-Xylene	4340 ⁴	<20000	<1.00	<1.00	<1.00
p-Isopropyltoluene	-	<20000	<1.00	<1.00	<1.00
sec-Butylbenzene	104	<20000	<1.00	<1.00	<1.00
Styrene	100	<20000	<1.00	<1.00	<1.00
tert-Butylbenzene	104	<20000	<1.00	<1.00	<1.00
Tetrachloroethene	5.00	<20000	<1.00	<1.00	<1.00
Toluene	1000	<20000	<1.00	<1.00	<1.00
trans-1,2-Dichloroethene	1000	<20000	<1.00	<1.00	<1.00
trans-1,3-Dichloropropene	0.559	<20000	<1.00	<1.00	<1.00
Trichloroethene	3.32	<20000	<1.00	<1.00	<1.00
Trichlorofluoromethane	2050	<20000	<1.00	<1.00	<1.00
Vinyl chloride	2.00	<4000	<0.200	<0.200	<0.200

Notes:

1. All results reported in micrograms per liter (ug/L)
2. Initial Default Target Levels (IDTL) from Idaho Risk Evaluation Manual, July 2004
3. Bold values exceed the IDTL
4. ITDL for total Xylenes
5. - indicates there is no IDTL for the analyte

Table 6 - EPA Method 8270 (PAHs/PCP) Groundwater Results¹
Limited Phase II ESA
Alpine Lumber Facility, Sandpoint Idaho

Parameter	IDTL (ug/L) ²	ALFBH2GW01	ALFBH2 GW501	ALFBH4 GW01	ALFBH5 GW01	ALFBH6 GW01	ALFBH7GW01 ³
2-Methylnaphthalene	41.7	<0.01	0.01	0.02	<0.0971	<0.0962	<0.0971
Acenaphthene	626	<0.01	<0.01	0.02	<0.0971	<0.0962	<0.0971
Acenaphthylene	626	<0.01	<0.01	<0.01	<0.0971	<0.0962	<0.0971
Anthracene	3130	<0.01	<0.01	0.21	<0.0971	<0.0962	<0.0971
Benzo(a)anthracene	0.0765	<0.01	<0.01	0.03	0.0236	0.0293	0.0273
Benzo(a)pyrene	0.200	<0.01	<0.01	<0.01	0.0123	0.0264	0.0126
Benzo(b)fluoranthene	0.0765	<0.01	<0.01	0.01	0.0167	0.0383	0.0158
Benzo(ghi)perylene	313	<0.01	<0.01	<0.01	<0.0971	<0.0962	<0.0971
Benzo(k)fluoranthene	0.765	<0.01	<0.01	<0.01	0.0115	0.0392	0.0137
Chrysene	7.65	<0.01	<0.01	0.08	0.0202	0.182	0.0168
Dibenz(a,h)anthracene	0.417	<0.01	<0.01	<0.01	<0.00971	0.0126	<0.00971
Fluoranthene	417	<0.01	<0.01	0.02	<0.0971	<0.0962	0.0980
Fluorene	417	<0.01	<0.01	0.05	<0.0971	<0.0962	<0.0971
Indeno(1,2,3-cd)pyrene	0.0765	<0.01	<0.01	<0.01	<0.00971	0.0235	<0.00971
Naphthalene	209	0.02	0.03	0.04	<0.0971	<0.0962	<0.0971
Pentachlorophenol	1.00	0.14	0.15	0.02	<0.971	<0.962	<0.971
Phenanthrene	313	0.02	0.03	0.06	0.160	0.124	0.198
Pyrene	313	0.01	<0.01	0.14	0.103	<0.0962	0.118

Notes:

1. All results reported in ug/L
2. Initial Default Target Levels (IDTL) from Idaho Risk Evaluation Manual, July 2004
3. Sample ALFBH7GW01 was reanalyzed following expiration of the method hold period. All analytes were non-detectable. See Appendix F for case narrative regarding this reanalysis.

Table 6 - EPA Method 8270 (PAHs/PCP) Groundwater Results¹
Limited Phase II ESA
Alpine Lumber Facility, Sandpoint Idaho

Parameter	IDTL (ug/L)²	ALFBH8GW01	ALFBH9GW01	ALFBH10GW01	ALFBH11GW01	ALFBH12GW01	ALFBH13GW01
2-Methylnaphthalene	41.7	9.34	759	2.34	1110	298	24.3
Acenaphthene	626	14.0	838	3.25	1380	382	174
Acenaphthylene	626	<0.980	<9.71	<0.472	<49.5	<2.02	<1.98
Anthracene	3130	<0.980	77.1	<0.472	252	17.5	10.5
Benzo(a)anthracene	0.0765	0.118	103	0.102	387	17.8	9.38
Benzo(a)pyrene	0.200	<0.0980	45.1	<0.0472	205	9.68	4.75
Benzo(b)fluoranthene	0.0765	<0.0980	40.0	<0.0472	223	10.5	5.26
Benzo(ghi)perylene	313	<0.980	16.2	<0.472	73.4	3.60	<1.98
Benzo(k)fluoranthene	0.765	<0.0980	42.0	<0.0472	148	6.88	3.29
Chrysene	7.65	0.103	66.7	0.0760	226	10.8	5.31
Dibenz(a,h)anthracene	0.417	<0.0980	7.07	<0.0472	29.9	1.52	0.733
Fluoranthene	417	2.24	427	1.35	1450	91.4	62.0
Fluorene	417	7.31	496	2.12	1010	160	136
Indeno(1,2,3-cd)pyrene	0.0765	<0.0980	16.0	<0.0472	71.2	3.45	1.69
Naphthalene	209	45.8	10300	12.4	17000	3580	79.4
Pentachlorophenol	1.00	<9.80	84.6	<4.72	<495	<20.2	<19.8
Phenanthrene	313	14.9	1210	5.94	2800	310	280
Pyrene	313	1.91	367	1.18	1310	84.3	49.6

Notes:

1. All results reported in ug/L
2. Initial Default Target Levels (IDTL) from Idaho Risk Evaluation Manual, July 2004
3. Sample ALFBH7GW01 was reanalyzed following expiration of the method hold period. All analytes were non-detectable. See Appendix F for case narrative regarding this reanalysis.

Table 6 - EPA Method 8270 (PAHs/PCP) Groundwater Results¹
Limited Phase II ESA
Alpine Lumber Facility, Sandpoint Idaho

Parameter	IDTL (ug/L)²	ALFBH14GW01	ALFBH15GW01	ALFMW3GW01	ALFMW-W1SGW01	ALFMW2GW01
2-Methylnaphthalene	41.7	32.9	22100	1.56	0.113	0.276
Acenaphthene	626	334	34400	2.82	<0.0990	5.11
Acenaphthylene	626	<3.00	<505	<0.100	<0.0990	<0.101
Anthracene	3130	20.1	6120	<0.100	<0.0990	0.444
Benzo(a)anthracene	0.0765	14.9	13000	<0.0100	0.0189	0.214
Benzo(a)pyrene	0.200	6.50	6240	<0.0100	<0.00990	0.0247
Benzo(b)fluoranthene	0.0765	7.19	5440	<0.0100	0.0130	0.0383
Benzo(ghi)perylene	313	2.42	2120	<0.100	<0.0990	<0.101
Benzo(k)fluoranthene	0.765	4.92	5920	<0.0100	0.0115	0.0328
Chrysene	7.65	9.27	7200	<0.0100	0.0128	0.105
Dibenz(a,h)anthracene	0.417	1.02	879	<0.0100	<0.00990	<0.0101
Fluoranthene	417	85.6	49900	0.119	<0.0990	4.65
Fluorene	417	191	25700	0.871	<0.0990	3.44
Indeno(1,2,3-cd)pyrene	0.0765	2.33	2080	<0.0100	<0.00990	<0.0101
Naphthalene	209	594	77200	12.3	0.919	4.73
Pentachlorophenol	1.00	<20.0	<5050	<1.00	<0.990	<1.01
Phenanthrene	313	338	106000	1.24	0.133	6.76
Pyrene	313	75.0	47100	0.114	<0.0990	4.23

Notes:

1. All results reported in ug/L
2. Initial Default Target Levels (IDTL) from Idaho Risk Evaluation Manual, July 2004
3. Sample ALFBH7GW01 was reanalyzed following expiration of the method hold period. All analytes were non-detectable. See Appendix F for case narrative regarding this reanalysis.

Table 7 - EPA Method 8290 (Dioxins/Furans) Groundwater Results¹
Limited Phase II ESA
Alpine Lumber Facility, Sandpoint Idaho

Parameter Description	TEF ²	ALFBH2GW01		ALFBH2GW501		ALFBH7GW01		ALFBH9GW01	
		Result	TEF Factor ³	Result	TEF Factor	Result	TEF Factor	Result	TEF Factor
1,2,3,4,6,7,8-Hepta CDD	0.01	21.3	0.213	20.8	0.208	367	3.67	670000	6700
1,2,3,4,6,7,8-Hepta CDF	0.01	7.6	0.076	<6.70	0.0335	114	1.14	31300	313
1,2,3,4,7,8,9-Hepta CDF	0.01	<1.50	0.0075	<1.40	0.007	4.9	0.049	1510	15.1
1,2,3,4,7,8-Hexa CDD	0.1	<0.72	0.036	<0.60	0.03	<0.94	0.047	501	50.1
1,2,3,4,7,8-Hexa CDF	0.1	<0.64	0.032	<0.85	0.0425	<5.30	0.265	1720	172
1,2,3,6,7,8-Hexa CDD	0.1	<0.74	0.037	<0.62	0.031	<8.20	0.41	5350	535
1,2,3,6,7,8-Hexa CDF	0.1	<0.61	0.0305	<0.82	0.041	<12.00	0.6	227	22.7
1,2,3,7,8,9-Hexa CDD	0.1	<0.69	0.0345	<0.58	0.029	1.25	0.125	2810	281
1,2,3,7,8,9-Hexa CDF	0.1	<0.85	0.0425	<1.10	0.055	<0.93	0.0465	27.5	2.75
1,2,3,7,8-Penta CDD	1	<2.20	1.1	<1.00	0.5	<1.80	0.9	63.4	63.4
1,2,3,7,8-Penta CDF	0.05	<1.40	0.035	<0.97	0.02425	<1.20	0.03	89.8	4.49
2,3,4,6,7,8-Hexa CDF	0.1	<0.69	0.0345	<0.93	0.0465	<1.10	0.055	297	29.7
2,3,4,7,8-Penta CDF	0.5	<1.40	0.35	<0.96	0.24	<1.20	0.3	263	131.5
2,3,7,8-Tetra CDD	1	<6.30	3.15	<2.00	1	<3.70	1.85	<5.10	2.55
2,3,7,8-Tetra CDF	0.1	<1.50	0.075	<1.00	0.05	<1.10	0.055	20.4	2.04
Octa CDD	0.0001	303	0.03030	295	0.030	5500	0.550	4650000	465.0
Octa CDF	0.0001	30	0.00300	28.5	0.003	583	0.058	174000	17.4
Total Hepta CDD	N/A	43.5		39.8		703		2470000	
Total Hepta CDF	N/A	30		22.2		643		190000	
Total Hexa CDD	N/A	<0.90		<0.66		12.7		143000	
Total Hexa CDF	N/A	3.07		4.18		101		31500	
Total Penta CDD	N/A	<2.20		<1.00		<1.80		931	
Total Penta CDF	N/A	<1.90		<1.00		10.3		2370	
Total Tetra CDD	N/A	<6.30		<2.00		<3.70		175	
Total Tetra CDF	N/A	5.8		1.6		<1.80		131	
	ITDL ⁴ (pg/L)								
2,3,7,8-TCDD	30.0000		5.2868		2.3701		10.1508		8807.73

Notes:

1. All results reported in picograms per gram
2. Toxic Equivalency Factors (TEF) as defined in the Idaho Risk Evaluation Manual Appendix N.
3. The TEF Factor is the product of the sample result and the TEF value. One half the detection limit was used for non-detectable analytes.
4. Initial Default Target Levels (IDTL) from Idaho Risk Evaluation Manual, July 2004. The sum of the TEF Factors for each parameter are compared to the IDTL for 2,3,7,8-TCDD. **Bold values exceed the IDTL.**

Table 7 - EPA Method 8290 (Dioxins/Furans) Groundwater Results¹
Limited Phase II ESA
Alpine Lumber Facility, Sandpoint Idaho

Parameter Description	TEF ²	ALFMW3GW01		ALFMW-W1SGW01		ALFMW2GW01	
		Result	TEF Factor	Result	TEF Factor	Result	TEF Factor
1,2,3,4,6,7,8-Hepta CDD	0.01	14.1	0.141	23	0.23	5.91	0.0591
1,2,3,4,6,7,8-Hepta CDF	0.01	<1.40	0.007	<1.80	0.009	<0.61	0.00305
1,2,3,4,7,8,9-Hepta CDF	0.01	<0.77	0.00385	<0.92	0.0046	<0.86	0.0043
1,2,3,4,7,8-Hexa CDD	0.1	<0.70	0.035	<1.20	0.06	<1.00	0.05
1,2,3,4,7,8-Hexa CDF	0.1	<0.94	0.047	<0.85	0.0425	<0.74	0.037
1,2,3,6,7,8-Hexa CDD	0.1	<0.72	0.036	<1.20	0.06	<1.10	0.055
1,2,3,6,7,8-Hexa CDF	0.1	<0.90	0.045	<0.81	0.0405	<0.71	0.0355
1,2,3,7,8,9-Hexa CDD	0.1	<0.67	0.0335	<1.20	0.06	<0.99	0.0495
1,2,3,7,8,9-Hexa CDF	0.1	<1.30	0.065	<1.10	0.055	<1.00	0.05
1,2,3,7,8-Penta CDD	1	<1.70	0.85	<2.10	1.05	<2.00	1
1,2,3,7,8-Penta CDF	0.05	<1.40	0.035	<1.10	0.0275	<1.10	0.0275
2,3,4,6,7,8-Hexa CDF	0.1	<1.00	0.05	<0.92	0.046	<0.81	0.0405
2,3,4,7,8-Penta CDF	0.5	<1.30	0.325	<1.10	0.275	<1.00	0.25
2,3,7,8-Tetra CDD	1	<1.00	0.5	<1.40	0.7	<1.30	0.65
2,3,7,8-Tetra CDF	0.1	<1.00	0.05	<1.30	0.065	<0.86	0.043
Octa CDD	0.0001	96.7	0.010	159	0.016	32.2	0.00322
Octa CDF	0.0001	4.1	0.0004	7	0.001	<2.00	0.00010
Total Hepta CDD	N/A	45.8		55.8		14.1	
Total Hepta CDF	N/A	<2.20		5.98		1.95	
Total Hexa CDD	N/A	1.55		<1.40		<1.00	
Total Hexa CDF	N/A	<1.00		1.19		<0.80	
Total Penta CDD	N/A	<1.70		<2.10		<2.00	
Total Penta CDF	N/A	<1.40		<1.10		<1.00	
Total Tetra CDD	N/A	<1.00		<1.40		<1.30	
Total Tetra CDF	N/A	2.4		<1.30		<0.86	
	ITDL ⁴ (pg/L)						
2,3,7,8-TCDD	30.0000		2.23343		2.7417		2.35777

Notes:

1. All results reported in picograms per gram
2. Toxic Equivalency Factors (TEF) as defined in the Idaho Risk Evaluation Manual Appendix N.
3. The TEF Factor is the product of the sample result and the TEF value. One half the detection limit was used for non-detectable analytes.
4. Initial Default Target Levels (IDTL) from Idaho Risk Evaluation Manual, July 2004. The sum of the TEF Factors for each parameter are compared to the IDTL for 2,3,7,8-TCDD. **Bold values exceed the IDTL.**

Analytical Results Summary Tables

URS March-May 2007 Assessment

Table 1 - EPA Method 8260B (VOCs) Soil Results¹
Limited Phase II ESA Supplemental Assessment
Alpine Lumber Facility, Sandpoint Idaho

Analyte	IDTL ² (mg/kg)	ALFBH18@3.5-4	ALFBH18@14-14.5	ALFBH19@2.5-3	ALFBH19@15-16	ALFBH20@3-4	ALFBH20@14-15
1,1,1,2-Tetrachloroethane	0.0409	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
1,1,1-Trichloroethane	2.00	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
1,1,2,2-Tetrachloroethane	0.000915	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
1,1,2-Trichloroethane	0.0141	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
1,1-Dichloroethane	3.48	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
1,1-Dichloroethene	0.0388	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
1,1-Dichloropropene	-	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
1,2,3-Trichlorobenzene	-	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
1,2,3-Trichloropropane	0.000245	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
1,2,4-Trichlorobenzene	0.692	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
1,2,4-Trimethylbenzene	0.193	<0.115	<0.0526	<0.0472	0.0938	<0.0499	0.479
1,2-Dibromo-3-chloropropane	0.000975	<0.574	<0.263	<0.236	<0.238	<0.249	<0.270
1,2-Dibromoethane	-	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
1,2-Dichlorobenzene	5.25	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
1,2-Dichloroethane (EDC)	0.0755	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
1,2-Dichloropropane	-	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
1,3,5-Trimethylbenzene	0.145	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	0.169
1,3-Dichlorobenzene	0.229	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
1,3-Dichloropropane	-	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
1,4-Dichlorobenzene	0.0755	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
2,2-Dichloropropane	-	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
2-Butanone	11.8	<1.15	<0.526	<0.472	<0.477	<0.499	<0.539
2-Chlorotoluene	1.56	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
2-Hexanone	-	<1.15	<0.526	<0.472	<0.477	<0.499	<0.539
4-Chlorotoluene	-	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
4-Methyl-2-pentanone	17.6	<1.15	<0.526	<0.472	<0.477	<0.499	<0.539
Acetone	17.4	<1.15	<0.526	<0.472	<0.477	<0.499	<0.539
Benzene	0.0178	<0.0230	<0.0105	<0.00944	<0.00953	<0.00998	<0.0108
Bromobenzene	-	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
Bromochloromethane	-	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
Bromodichloromethane	0.00268	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
Bromoform	0.0292	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
Bromomethane	0.0501	<0.574	<0.263	<0.236	<0.238	<0.249	<0.270
Carbon disulfide	5.97	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
Carbon tetrachloride	0.0114	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
Chlorobenzene	0.618	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
Chloroethane	0.0533	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
Chloroform	0.00564	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
Chloromethane	0.0231	<0.574	<0.263	<0.236	<0.238	<0.249	<0.270
cis-1,2-Dichloroethene	0.193	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
cis-1,3-Dichloropropene	0.00245	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
Dibromochloromethane	0.00202	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
Dibromomethane	-	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
Dichlorodifluoromethane	2.96	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
Ethylbenzene	10.2	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	0.0799
Hexachlorobutadiene	0.0378	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
Isopropylbenzene	3.46	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
m,p-Xylene	1.67 ⁴	<0.459	<0.210	<0.189	<0.191	<0.200	<0.216
Methyl tert-butyl ether	0.0364	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
Methylene chloride	0.0169	<1.15	<0.526	<0.472	<0.477	<0.499	<0.539
Naphthalene	1.14	<0.230	<0.105	<0.0944	26.6	1.53	134
n-Butylbenzene	-	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
n-Propylbenzene	-	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
o-Xylene	1.67 ⁴	<0.230	<0.105	<0.0944	<0.0953	<0.0998	<0.108
p-Isopropyltoluene	-	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
sec-Butylbenzene	1.17	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
Styrene	1.83	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
tert-Butylbenzene	0.852	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
Tetrachloroethene	0.0288	<0.0345	<0.0158	<0.0142	<0.0143	<0.0150	<0.0162
Toluene	4.89	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
trans-1,2-Dichloroethene	0.365	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
trans-1,3-Dichloropropene	0.00245	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
Trichloroethene	0.00288	<0.0345	<0.0158	<0.0142	<0.0143	<0.0150	<0.0162
Trichlorofluoromethane	10.4	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539
Vinyl chloride	0.00963	<0.115	<0.0526	<0.0472	<0.0477	<0.0499	<0.0539

Notes:

1. All results reported in mg/kg.
2. Initial Default Target Levels (IDTL) from Idaho Risk Evaluation Manual, July 2004
3. Bold values exceed the IDTL
4. ITDL for total Xylenes
5. - indicates there is no ITDL for the analyte

Table 2 - EPA Method 8270 (PAHs/PCP) Soil Results¹
Limited Phase II ESA Supplemental Assessment
Alpine Lumber Facility, Sandpoint Idaho

Parameter	IDTL (mg/kg) ²	ALFBH18@3.5-4	ALFBH18@14-14.5	ALFBH19@2.5-3	ALFBH19@15-16	ALFBH20@3-4	ALFBH20@14-15
1-Methylnaphthalene	-	<0.0132	<0.0133	<0.0131	0.783	<0.0130	7.65
2,4,5-Trichlorophenol	7.38	<0.659	<0.667	<0.656	<2.52	<0.648	<26.1
2,4,6-Trichlorophenol	0.00436	<0.659	<0.667	<0.656	<2.52	<0.648	<26.1
2-Methylnaphthalene	3.31	<0.0132	<0.0133	<0.0131	1.41	<0.0130	15.0
Acenaphthene	52.3	<0.0132	<0.0133	<0.0131	1.72	<0.0130	14.9
Acenaphthylene	78	<0.0132	<0.0133	<0.0131	<0.0504	<0.0130	<0.522
Anthracene	1040	<0.0132	<0.0133	<0.0131	0.527	<0.0130	6.01
Benzo (a) anthracene	0.422	<0.0132	<0.0133	<0.0131	0.766	<0.0130	5.38
Benzo (a) pyrene	0.0422	<0.0132	<0.0133	<0.0131	0.393	<0.0130	2.58
Benzo (b) fluoranthene	0.422	<0.0132	<0.0133	<0.0131	0.417	<0.0130	2.69
Benzo (ghi) perylene	1180	<0.0132	<0.0133	<0.0131	0.154	<0.0130	0.873
Benzo (k) fluoranthene	4.22	<0.0132	<0.0133	<0.0131	0.311	<0.0130	2.10
Chrysene	33.4	<0.0132	<0.0133	<0.0131	0.441	<0.0130	4.43
Dibenzo (a,h) anthracene	0.0422	<0.0132	<0.0133	<0.0131	0.109	<0.0130	0.629
Fluoranthene	364	<0.0132	<0.0133	<0.0131	2.80	<0.0130	20.7
Fluorene	54.8	<0.0132	<0.0133	<0.0131	1.49	<0.0130	11.7
Indeno (1,2,3-cd) pyrene	0.422	<0.0132	<0.0133	<0.0131	0.174	<0.0130	1.01
Naphthalene	1.14	<0.0132	<0.0133	<0.0131	3.29	<0.0130	48.0
Pentachlorophenol	0.00907	<0.659	<0.667	<0.656	<2.52	<0.648	<26.1
Phenanthrene	79.0	<0.0132	<0.0133	<0.0131	6.08	<0.0130	46.1
Pyrene	359	<0.0132	<0.0133	<0.0131	2.40	<0.0130	16.7

Notes:

1. All results reported in mg/kg
2. Initial Default Target Levels (IDTL) from Idaho Risk Evaluation Manual, July 2004

Table 3 - EPA Method 8260B (VOCs) Groundwater Results¹
Limited Phase II ESA Supplemental Assessment
Alpine Lumber Facility, Sandpoint Idaho

Parameter	IDTL (ug/L) ²	ALFMW2GW02	ALFMW3GW02	ALFMW4GW02	ALFMW5GW02	ALFMW6GW02
1,1,1,2-Tetrachloroethane	2.15	<1.00	<1.00	<1.00	<20.0	<2000
1,1,1-Trichloroethane	200	<1.00	<1.00	<1.00	<20.0	<2000
1,1,2,2-Tetrachloroethane	0.279	<1.00	<1.00	<1.00	<20.0	<2000
1,1,2-Trichloroethane	5.00	<1.00	<1.00	<1.00	<20.0	<2000
1,1-Dichloroethane	1040	<1.00	<1.00	<1.00	<20.0	<2000
1,1-Dichloroethene	7.00	<1.00	<1.00	<1.00	<20.0	<2000
1,1-Dichloropropene	-	<1.00	<1.00	<1.00	<20.0	<2000
1,2,3-Trichlorobenzene	-	<1.00	<1.00	<1.00	<20.0	<2000
1,2,3-Trichloropropane	0.0279	<1.00	<1.00	<1.00	<20.0	<2000
1,2,4-Trichlorobenzene	70.0	<1.00	<1.00	<1.00	<20.0	<2000
1,2,4-Trimethylbenzene	439.0	<1.00	<1.00	<1.00	<20.0	<2000
1,2-Dibromo-3-chloropropane	0.200	<5.00	<5.00	<5.00	<100	<10000
1,2-Dibromoethane	-	<1.00	<1.00	<1.00	<20.0	<2000
1,2-Dichlorobenzene	600	<1.00	<1.00	<1.00	<20.0	<2000
1,2-Dichloroethane (EDC)	5.00	<1.00	<1.00	<1.00	<20.0	<2000
1,2-Dichloropropane	5.00	<1.00	<1.00	<1.00	<20.0	<2000
1,3,5-Trimethylbenzene	304	<1.00	<1.00	<1.00	<20.0	<2000
1,3-Dichlorobenzene	9.39	<1.00	<1.00	<1.00	<20.0	<2000
1,3-Dichloropropane	-	<1.00	<1.00	<1.00	<20.0	<2000
1,4-Dichlorobenzene	75.0	<1.00	<1.00	<1.00	<20.0	<2000
2,2-Dichloropropane	-	<1.00	<1.00	<1.00	<20.0	<2000
2-Butanone	6260	<10.0	<10.0	<10.0	<200	<20000
2-Chlorotoluene	209	<1.00	<1.00	<1.00	<20.0	<2000
2-Hexanone	209	<10.0	<10.0	<10.0	<200	<20000
4-Chlorotoluene	-	<1.00	<1.00	<1.00	<20.0	<2000
4-Methyl-2-pentanone	8970	<10.0	<10.0	<10.0	<200	<20000
Acetone	9390	<25.0	<25.0	<25.0	<500	<50000
Benzene	5.00	<1.00	<1.00	<1.00	<20.0	<2000
Bromobenzene	-	<1.00	<1.00	<1.00	<20.0	<2000
Bromochloromethane	-	<1.00	<1.00	<1.00	<20.0	<2000
Bromodichloromethane	0.901	<1.00	<1.00	<1.00	<20.0	<2000
Bromoform	7.07	<1.00	<1.00	<1.00	<20.0	<2000
Bromomethane	14.6	<5.00	<5.00	<5.00	<100	<10000
Carbon disulfide	1040	<1.00	<1.00	<1.00	<20.0	<2000
Carbon tetrachloride	4.56	<1.00	<1.00	<1.00	<20.0	<2000
Chlorobenzene	100	<1.00	<1.00	<1.00	<20.0	<2000
Chloroethane	19.3	<1.00	<1.00	<1.00	<20.0	<2000
Chloroform	1.80	<1.00	<1.00	<1.00	<20.0	<2000
Chloromethane	4.30	<5.00	<5.00	<5.00	<100	<10000
cis-1,2-Dichloroethene	70.00	<1.00	<1.00	<1.00	<20.0	<2000
cis-1,3-Dichloropropene	0.559	<1.00	<1.00	<1.00	<20.0	<2000
Dibromochloromethane	0.665	<1.00	<1.00	<1.00	<20.0	<2000
Dibromomethane	-	<1.00	<1.00	<1.00	<20.0	<2000
Dichlorodifluoromethane	195	<1.00	<1.00	<1.00	<20.0	<2000
Ethylbenzene	700	<1.00	<1.00	<1.00	<20.0	<2000
Hexachlorobutadiene	0.716	<1.00	<1.00	<1.00	<20.0	<2000
Isopropylbenzene	1040	<1.00	<1.00	<1.00	<20.0	<2000
m,p-Xylene	4340 ⁴	<2.00	<2.00	<2.00	<40.0	<4000
Methyl tert-butyl ether	16.9	<1.00	<1.00	<1.00	<20.0	<2000
Methylene chloride	7.45	<10.0	<10.0	<10.0	<200	<20000
Naphthalene	209	19.1	2.59	<2.00	182	7820
n-Butylbenzene	-	<1.00	<1.00	<1.00	<20.0	<2000
n-Propylbenzene	-	<1.00	<1.00	<1.00	<20.0	<2000
o-Xylene	4340 ⁴	<1.00	<1.00	<1.00	<20.0	<2000
p-Isopropyltoluene	-	<1.00	<1.00	<1.00	<20.0	<2000
sec-Butylbenzene	104	<1.00	<1.00	<1.00	<20.0	<2000
Styrene	100	<1.00	<1.00	<1.00	<20.0	<2000
tert-Butylbenzene	104	<1.00	<1.00	<1.00	<20.0	<2000
Tetrachloroethene	5.00	<1.00	<1.00	<1.00	<20.0	<2000
Toluene	1000	<1.00	<1.00	<1.00	<20.0	<2000
trans-1,2-Dichloroethene	1000	<1.00	<1.00	<1.00	<20.0	<2000
trans-1,3-Dichloropropene	0.559	<1.00	<1.00	<1.00	<20.0	<2000
Trichloroethene	3.32	<1.00	<1.00	<1.00	<20.0	<2000
Trichlorofluoromethane	2050	<1.00	<1.00	<1.00	<20.0	<2000
Vinyl chloride	2.00	<0.200	<0.200	<0.200	<4.00	<400

Notes:

1. All results reported in micrograms per liter (ug/L)
2. Initial Default Target Levels (IDTL) from Idaho Risk Evaluation Manual, July 2004
3. Bold values exceed the IDTL
4. ITDL for total Xylenes
5. - indicates there is no IDTL for the analyte

Table 4 - EPA Method 8270 (PAHs/PCP) Groundwater Results¹
Limited Phase II ESA Supplemental Assessment
Alpine Lumber Facility, Sandpoint Idaho

Parameter	IDTL (ug/L) ²	ALFMW2GW02	ALFMW3GW02	ALFMW4GW02	ALFMW5GW02	ALFMW6GW02	ALFMWW1SGW02	ALFMW505GW02
Pentachlorophenol	1.00	<0.472	<0.472	<0.472	<0.472	5.32	<0.472	<0.472
1-Methylnaphthalene	-	7.10	0.392	<0.0943	19.0	247	<0.0943	14.3
2-Methylnaphthalene	41.7	<0.943	<0.0943	<0.0943	17.9	300	<0.0943	15.4
Acenaphthene	626	11.9	1.97	<0.0943	19.6	231	<0.0943	18.0
Acenaphthylene	626	<0.943	<0.0943	<0.0943	<9.43	<18.9	<0.0943	<9.43
Anthracene	3130	1.27	0.115	0.138	<9.43	21.9	<0.0943	<9.43
Benzo(a)anthracene	0.0765	0.248	<0.00943	<0.00943	2.06	5.09	<0.00943	2.37
Benzo(a)pyrene	0.200	<0.0943	<0.00943	<0.00943	<0.943	<1.89	<0.00943	<0.943
Benzo(b)fluoranthene	0.0765	0.236	<0.00943	<0.00943	2.30	3.52	<0.00943	2.62
Benzo(ghi)perylene	313	<0.943	<0.0943	<0.0943	<9.43	<18.9	<0.0943	<9.43
Benzo(k)fluoranthene	0.765	0.513	<0.00943	<0.00943	4.05	9.68	<0.00943	3.81
Chrysene	7.65	0.380	<0.00943	<0.00943	3.35	6.37	<0.00943	3.37
Dibenz(a,h)anthracene	0.417	<0.0943	<0.00943	<0.00943	<0.943	<1.89	<0.00943	<0.943
Fluoranthene	417	1.42	<0.0943	<0.0943	<9.43	<18.9	<0.0943	<9.43
Fluorene	417	7.57	0.243	<0.0943	10.4	97.9	<0.0943	<9.43
Indeno(1,2,3-cd)pyrene	0.0765	<0.0943	<0.00943	<0.00943	<0.943	<1.89	<0.00943	<0.943
Naphthalene	209	5.23	1.46	<0.0943	236	5100	<0.0943	206
Phenanthrene	313	4.82	<0.0943	<0.0943	10.3	96.5	<0.0943	<9.43
Pyrene	313	<0.943	<0.0943	<0.0943	<9.43	<18.9	<0.0943	<9.43

Notes:

1. All results reported in ug/L
2. Initial Default Target Levels (IDTL) from Idaho Risk Evaluation Manual, July 2004

ALPINE LUMBER
LIMITED PHASE II INVESTIGATION SUPPLEMENTAL ASSESSMENT
LABORATORY RESULTS AND DATA QUALITY EXCEPTIONS

Two soil samples from each borehole and a groundwater sample from each monitoring well were submitted to TestAmerica Laboratories for laboratory analysis of VOCs and PAHs (including PCP). VOC analysis for both soil and groundwater was by EPA Method 8260. Soil samples for VOC analysis were preserved by EPA 5035A Methods. PAH analysis for soil was by EPA Method 8270 Mod and for groundwater by EPA Method 8270-HVI. Analytical results are presented in Tables 1 through 4 and laboratory data is located in Appendix F. The results were compared to the Initial Default Target Levels (IDTL) described in the Idaho Risk Evaluation Manual dated July 2004. Table 1 presents a summary of soil and water samples that exceeded the IDTL.

Laboratory reports included data quality assurance and quality control (QA/QC) summaries provided by the laboratory. These QA/QC summaries in conjunction with data acceptance criteria outlined in *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review* (EPA, 1999) and *Region 1 EPA, New England Data Validation Functional Guidelines for Evaluating Environmental Analyses* (EPA 1996) were reviewed to assess the usability of the data. The following summarizes findings of this review:

- Naphthalene results by EPA Method 8260B for soil samples ALBH19@15-16' and ALFBH20@14-15 were beyond the calibration range of the instrument and reported as "semi-quantitative" by the laboratory. These samples were reanalyzed at a dilution one day outside the method holding time. Consequently, the results from both the initial analysis and analysis at dilution are estimated values. No data quality exceptions were noted for naphthalene in EPA Method 8270 results.
- Analysis of sample ALFBH20@3-4' by EPA Method 8260B followed a sample that had a concentration of naphthalene ten times greater than the calibration range of the instrument. The laboratory case narrative stated that high concentrations in a sample can lead to carry over to the next sample. The laboratory reanalyzed sample ALFBH20@3-4' to determine if a carry over of naphthalene had occurred. Reanalysis results for naphthalene in the sample was non-detect. Reanalysis, though, was performed one day outside the method holding time and is not usable. The naphthalene result from EPA Method 8270 analysis of ALFBH20@3-4' was non-detect. The reanalysis non-detect result and EPA Method 8270 naphthalene non-detect result suggest that carryover likely did occur.
- Surrogate recoveries for samples ALFBH19@2.5-3'' and ALFBH20@14-15' during analysis by EPA Method 8270 were outside the control limits. The recovery of nitrobenzene-d5 was greater than zero but less than the lower limit of method QC acceptance criteria while the recovery of the other surrogate

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Page 1 of 2

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compound was within the method QC acceptance criteria. Therefore the data is usable as reported.

- There was no recovery of surrogate benzo(a)pyrene-d12 for samples ALFMW5GW02 and ALFMW505GW02 during analysis by EPA Method 8270. These samples were run at a dilution of 100. At this dilution the surrogate recovery calculation does not provide useful information. The data is usable as reported.
- Calibration verification recovery was above the method control limit for benzo(k)fluoranthene and benzo(ghi)perylene in QC water samples for EPA Method 8270-HVI. Results below the reporting limit are not impacted. Results above the reporting limit may have a high bias. All benzo(ghi)perylene results were below the reporting limit and therefore are usable as reported. Benzo(k)fluoranthene was below the reporting limit in samples ALFMW3GW02, ALFMW4GW02, and ALFMWW1SGW02 and therefore the results are usable as reported. Benzo(k)fluoranthene in samples ALFMW2GW02, ALFMW5GW02, ALFMW505GW02, and ALFMW6GW02 were above the reporting limit and therefore may have a high bias and should be considered an estimate. Since the bias is high the actual concentrations are equal to or less than the estimated concentrations.

compound was within the method QC acceptance criteria. Therefore the data is usable as reported.

- There was no recovery of surrogate benzo(a)pyrene-d12 for samples ALFMW5GW02 and ALFMW505GW02 during analysis by EPA Method 8270. These samples were run at a dilution of 100. At this dilution the surrogate recovery calculation does not provide useful information. The data is usable as reported.
- Calibration verification recovery was above the method control limit for benzo(k)fluoranthene and benzo(ghi)perylene in QC water samples for EPA Method 8270-HVI. Results below the reporting limit are not impacted. Results above the reporting limit may have a high bias. All benzo(ghi)perylene results were below the reporting limit and therefore are usable as reported. Benzo(k)fluoranthene was below the reporting limit in samples ALFMW3GW02, ALFMW4GW02, and ALFMWW1SGW02 and therefore the results are usable as reported. Benzo(k)fluoranthene in samples ALFMW2GW02, ALFMW5GW02, ALFMW505GW02, and ALFMW6GW02 were above the reporting limit and therefore may have a high bias and should be considered an estimate. Since the bias is high the actual concentrations are equal to or less than the estimated concentrations.